HCD-BX5/DX5/DX5J

SERVICE MANUAL

Ver 1.2 2002.09

US Model
Canadian Model
AEP Model
UK Model
HCD-BX5

E Model
Australian Model
HCD-DX5/DX5J

Photo: HCD-BX5

- HCD-BX5/DX5/DX5J are the tuner, deck, CD and amplifier section in MHC-BX5/DX5/DX5J.

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	CDM58-K2BD38
	Base Unit Name	BU-K2BD38
	Optical Pick-up Name	KSM-213DAP
Tape deck Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	TCM-230MWR11

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS:
(HCD-BX5 US model only)
POWER OUTPUT AND TOTAL
HARMONIC DISTORTION:
with 6 ohm loads both channels driven, from 120-10,000 Hz; rates 95 watts per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section
US, Canadian model:
HCD-BX5:
Continuous RMS power output (reference)
80 + 80 watts
(6 ohms at 1 kHz, 10% THD)
Total harmonic distortion less than 0.07%
(6 ohms at 1 kHz, 50 W)

AEP, UK model:
HCD-BX5:
DIN power output (rated) 80 + 80 watts
(6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
100 + 100 watts
(6 ohms at 1 kHz, 10% THD)
Music power output (reference)
170 + 170 watts
(6 ohms at 1 kHz, 10% THD)

Other model:
HCD-DX5:
The following measured at AC 120, 220, 240 V 50/60 Hz

DIN power output (rated) 95 + 95 watts
(6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
125 + 125 watts
(6 ohms at 1 kHz, 10% THD)

Inputs	
MD/VIDEO IN: (phono jacks)	voltage 450/250 mV, impedance 47 kilohms
MIC: (mini jack)	sensitivity 1 mV, impedance 10 kilohms

Outputs	
PHONES: (stereo mini jack)	accepts headphones of 8 ohms or more
SPEAKER:	accepts impedance of 6 to 16 ohms

CD player section

System	Compact disc and digital audio system
Laser	Semiconductor laser (λ=780 nm) Emission duration: continuous
Laser output	Max. 44.6 μW* *This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.

— Continued on next page —

COMPACT DISC DECK RECEIVER

9-929-058-13
2002I1600-1
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Sony Corporation
Home Audio Company
Published by Sony Engineering Corporation

Wavelength	780 – 790 nm
Frequency response	2 Hz – 20 kHz (±0.5 dB)
Signal-to-noise ratio	More than 90 dB
Dynamic range	More than 90 dB
CD OPTICAL DIGITAL OUT	
(Square optical connector jack, rear panel)	
Wavelength	660 nm
Output Level	–18 dBm

Tape player section

Recording system	4-track 2-channel stereo
Frequency response	40 – 13,000 Hz (±3 dB), using Sony TYPE I cassette

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	87.5 – 108.0 MHz
Antenna	FM lead antenna
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
US, Canadian, Mexican, Argentina models:	
	530 – 1,710 kHz (with the interval set at 10 kHz)
	531 – 1,710 kHz (with the interval set at 9 kHz)
AEP, Saudi Arabia models:	
	531 – 1,602 kHz (with the interval set at 9 kHz)
Other models:	531 – 1,602 kHz (with the interval set at 9 kHz)
	530 – 1,710 kHz (with the interval set at 10 kHz)
Antenna	AM loop antenna
Antenna terminals	External antenna terminal
Intermediate frequency	450 kHz

General

Power requirements	
US, Canadian models:	120 V AC, 60 Hz
AEP, UK model:	230 V AC, 50/60 Hz
Australian model:	230-240 V AC, 50/60 Hz
Mexican model:	120 V AC, 50/60 Hz
Thailand model:	220 V AC, 50/60 Hz
Other models:	120 V, 220 V or 230 - 240 V AC, 50/60 Hz Adjustable with voltage selector

Power consumption	
US model:	
HCD-BX5:	160 watts
Canadian model:	
HCD-BX5:	150 watts
AEP, UK model:	
HCD-BX5:	190 watts
Other models:	
HCD-DX5:	230 watts

Dimensions (w/h/d)	Approx. 280 x 360 x 425 mm

Mass	
US model:	
HCD-DX5:	Approx. 9.5 kg
HCD-BX5:	Approx. 8.6 kg

Design and specifications are subject to change without notice.

SAFETY CHECK-OUT

(US model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

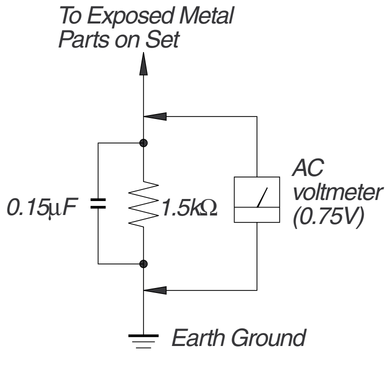

Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

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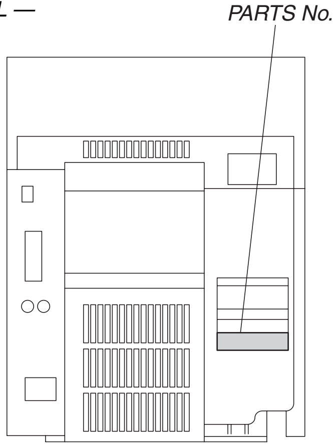
MODEL IDENTIFICATION

— BACK PANEL —

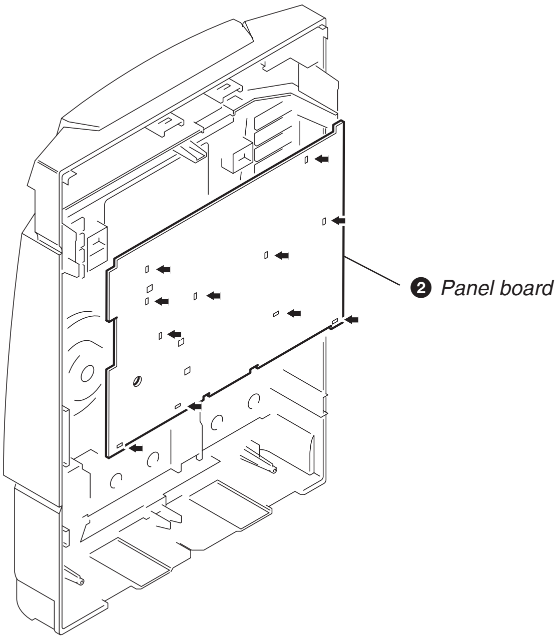


MODEL	PARTS No.
AED, AEP, CIS, UK, G, AUS, KR, MX, TH models	4-225-040-0☐
AR, E, EA, SP, TW, MY models	4-225-040-1☐
US, CND models	4-225-040-2☐

- Abbreviation

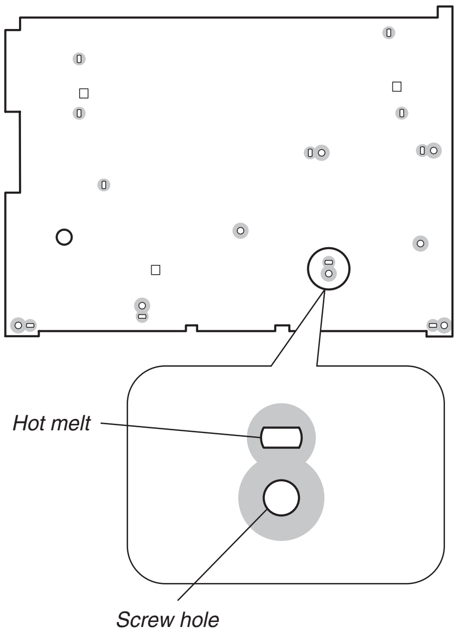
CND : Canadian model
AUS : Australian model
G : German model
AED : North European model
EA : Saudi Arabia model
MY : Malaysia model
SP : Singapore model
TH : Thai model
TW : Taiwan model
KR : Korea model
MX : Mexican model
AR : Argentina model

SECTION 1
SERVICE NOTE


❷ Panel board

❶ *Cut the eleven melted-connection points with a cutting plier.*

Note for installing the panel board


Hot melt
Screw hole

Attach the panel board with
six screws (+BVTP 2.6 × 8)
after the board is removed once.
Do not tighten the screws excessively.

SECTION 2
GENERAL

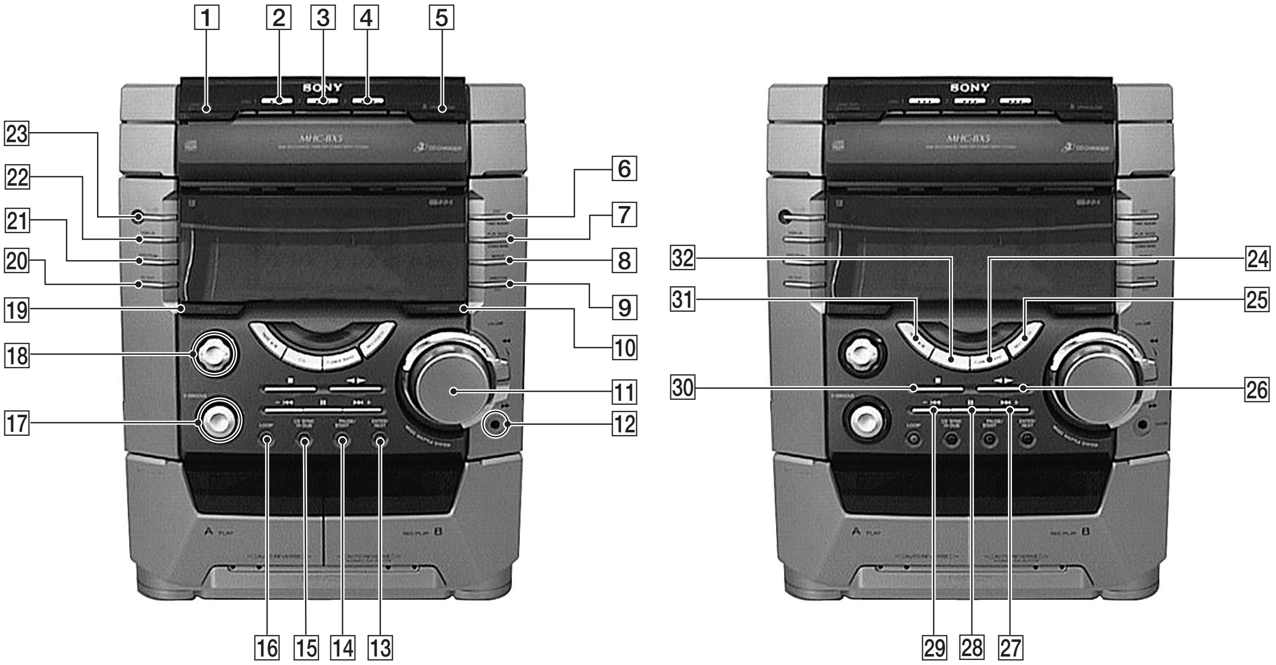


Photo: HCD-BX5

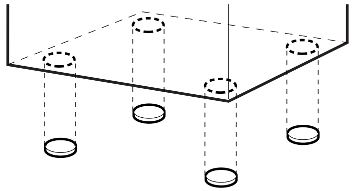
1	DISC SKIP EX-CHANGE button
2	DISC 1 button and indicator
3	DISC 2 button and indicator
4	DISC 3 button and indicator
5	⏏ OPEN/CLOSE button
6	EDIT, TUNER MOMERY button
7	PLAY MODE, STEREO/MONO button
8	REPEAT button
9	DIRECTION, PTY knob
10	SURROUND button
11	VOLUME knob
12	PHONE jack
13	ENTER/NEXT button
14	REC/PAUSE START button and indicator
15	CD SYNC HI-DUBB button
16	LOOP button
17	V-GROOVE button and indicator
18	CURSOL button and indicator
19	GROOVE button
20	EQ EDIT button
21	SPECTRUM button
22	DISPLAY button
23	I/⏻ button and indicator
24	TUNER BAND button
25	MD (VIDEO) button
26	◀▶ button
27	▶▶I + button
28	❚❚ button
29	– I◀◀ button
30	■ button
31	TAPE A/B button
32	CD button

This section is extracted from instruction manual.

Step 1: Hooking up the system (continued)

To attach the front speaker pads

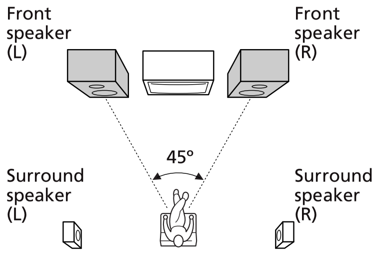
Attach the supplied front speaker pads to the bottom of the speakers to stabilize the speakers and prevent them from slipping.



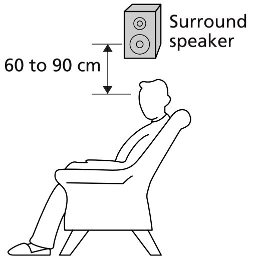
Positioning the speakers (MHC-BX7/DX7 only)

Before you connect them, determine the best location for your speakers.

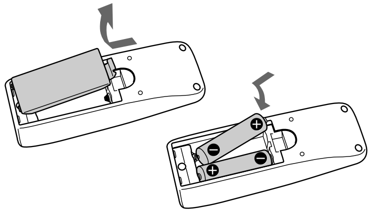
1 Place the front speakers at an angle of 45 degrees from your listening position.



2 Place the surround speakers facing each other at about 60 to 90 cm above your listening position.



Inserting two size AA (R6) batteries into the remote



Tip

With normal use, the batteries should last for about six months. When the remote no longer operates the system, replace both batteries with new ones.

Note

If you do not use the remote for a long period of time, remove the batteries to avoid possible damage from battery leakage.

When carrying this system

Do the following to protect the CD mechanism.

1 Make sure that all discs are removed from the unit.

2 Hold down CD and then press I/⏻ so that "LOCK" appears in the display.

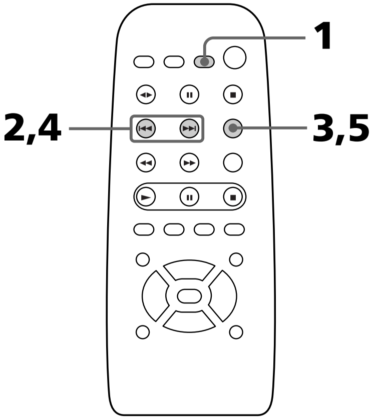
3 Unplug the AC power cord.

Step 2: Setting the time

You must set the time before using the timer functions.

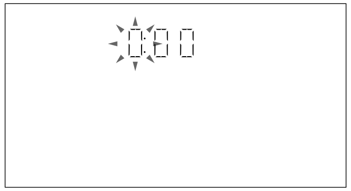
The clock is on a 24-hour system for the European model and a 12-hour system for other models.

The 24-hour system model is used for illustration purposes.



1 Press CLOCK/TIMER SET.

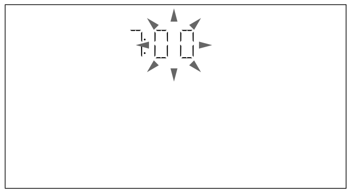
The hour indication flashes.



2 Press ⏮ or ⏭ repeatedly to set the hour.

3 Press ENTER.

The minute indication flashes.



4 Press ⏮ or ⏭ repeatedly to set the minute.

5 Press ENTER.

The clock starts working.

Tip

If you've made a mistake, start over from step 1.

To change the time

The previous explanation shows you how to set the time while the power is off. To change the time while the power is on, do the following:

1 Press CLOCK/TIMER SET.

2 Press ⏮ or ⏭ repeatedly to select SET CLOCK.

3 Press ENTER.

4 Perform steps 2 through 5 above.

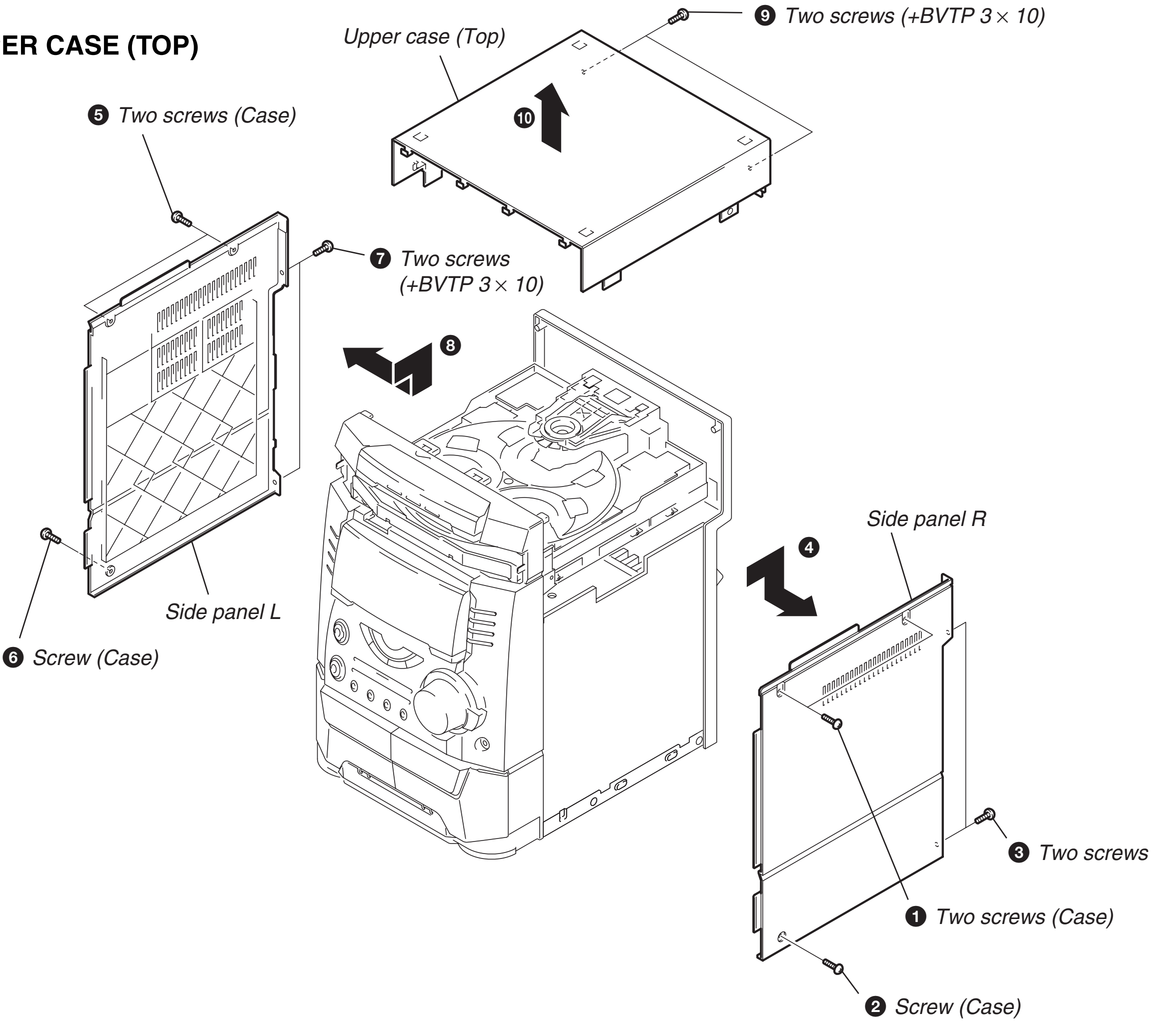
Note

The clock settings are canceled when you disconnect the power cord or if a power failure occurs.

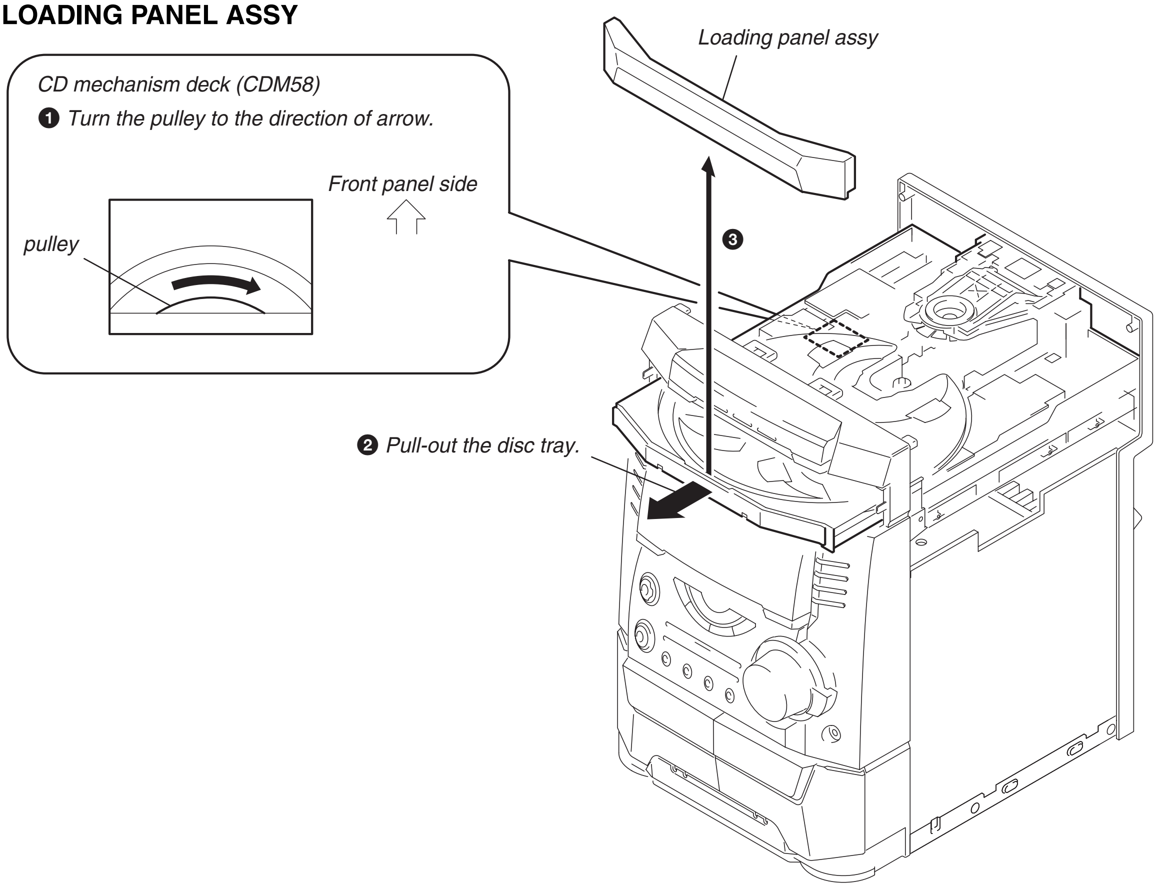
SECTION 3
DISASSEMBY

Note : Follow the disassembly procedure in the numerical order given.

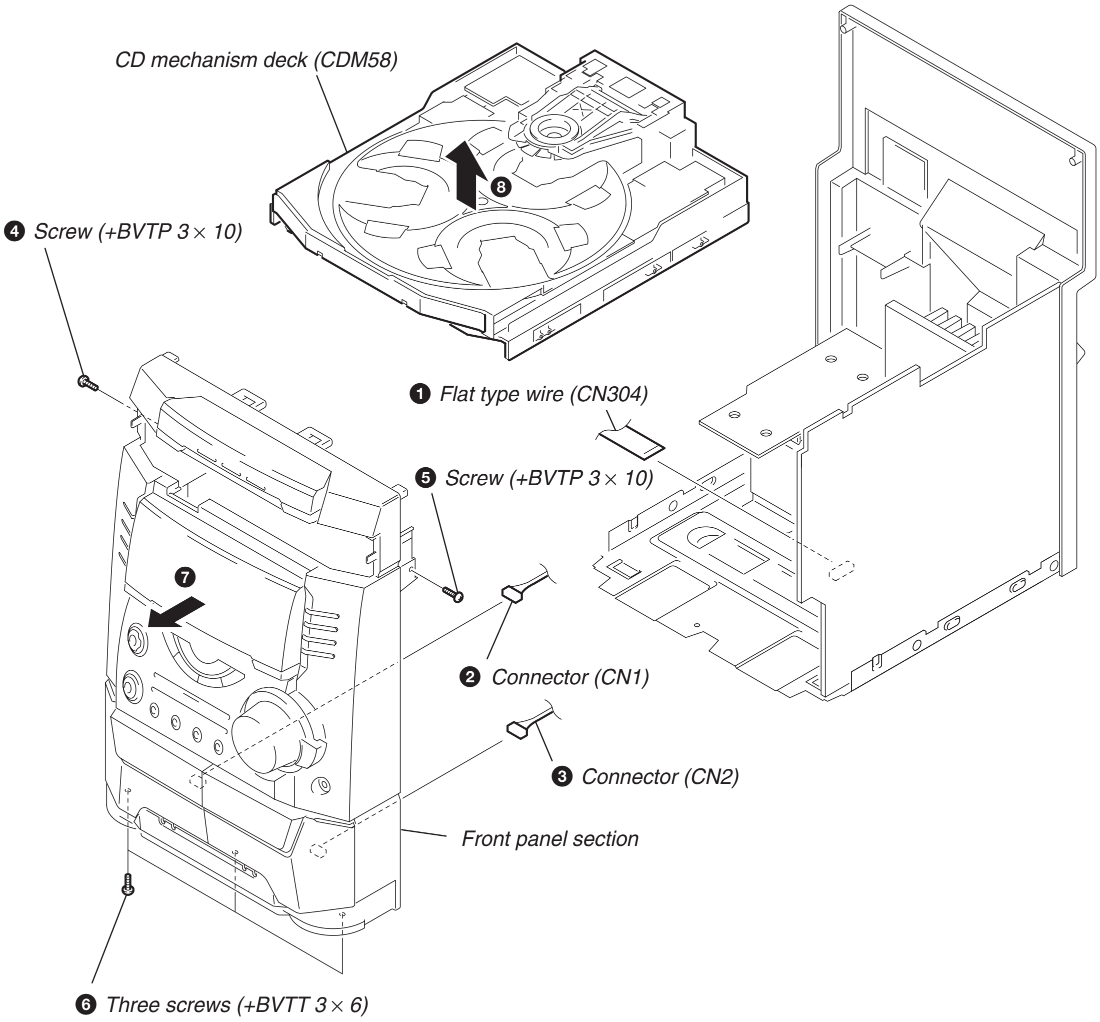
3-1. UPPER CASE (TOP)


❾ Two screws (+BVTP 3 × 10)
Upper case (Top)
❿
❺ Two screws (Case)
❼ Two screws (+BVTP 3 × 10)
❽
Side panel R
❹
Side panel L
❻ Screw (Case)
❸ Two screws
❶ Two screws (Case)
❷ Screw (Case)

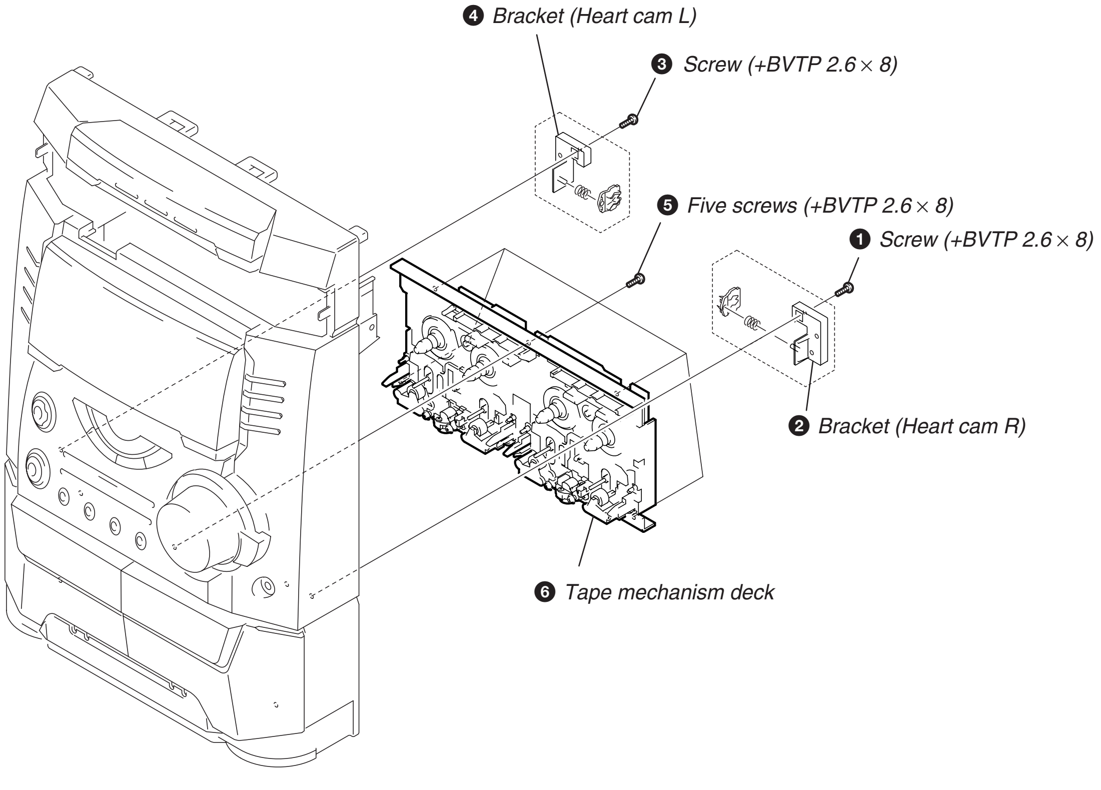
3-2. LOADING PANEL ASSY


Loading panel assy
CD mechanism deck (CDM58)
❶ Turn the pulley to the direction of arrow.
Front panel side
pulley
❸
❷ Pull-out the disc tray.

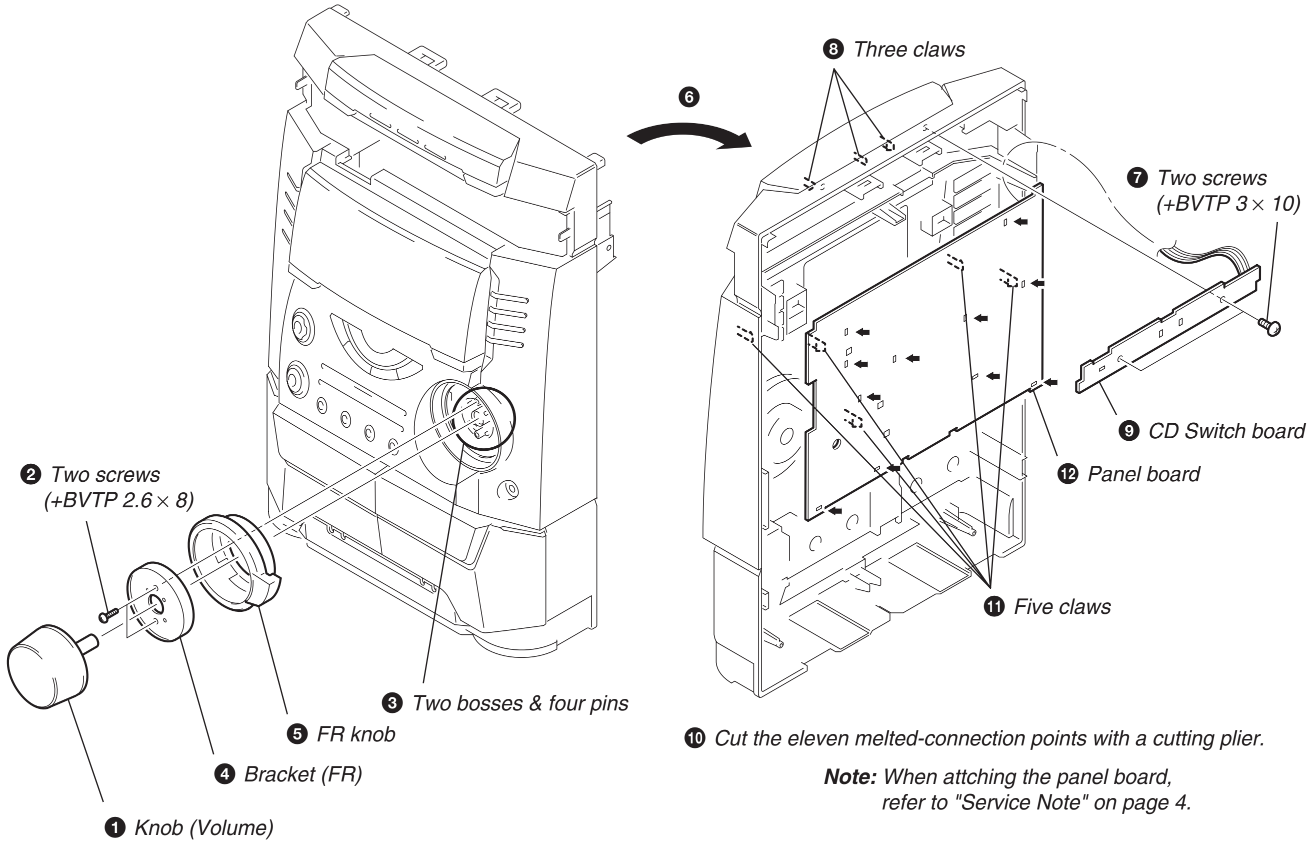
3-3. FRONT PANEL SECTION


CD mechanism deck (CDM58)
❽
❹ Screw (+BVTP 3 × 10)
❶ Flat type wire (CN304)
❺ Screw (+BVTP 3 × 10)
❼
❷ Connector (CN1)
❸ Connector (CN2)
Front panel section
❻ Three screws (+BVTT 3 × 6)

3-4. TAPE MECHANISM DECK


❹ Bracket (Heart cam L)
❸ Screw (+BVTP 2.6 × 8)
❺ Five screws (+BVTP 2.6 × 8)
❶ Screw (+BVTP 2.6 × 8)
❷ Bracket (Heart cam R)
❻ Tape mechanism deck

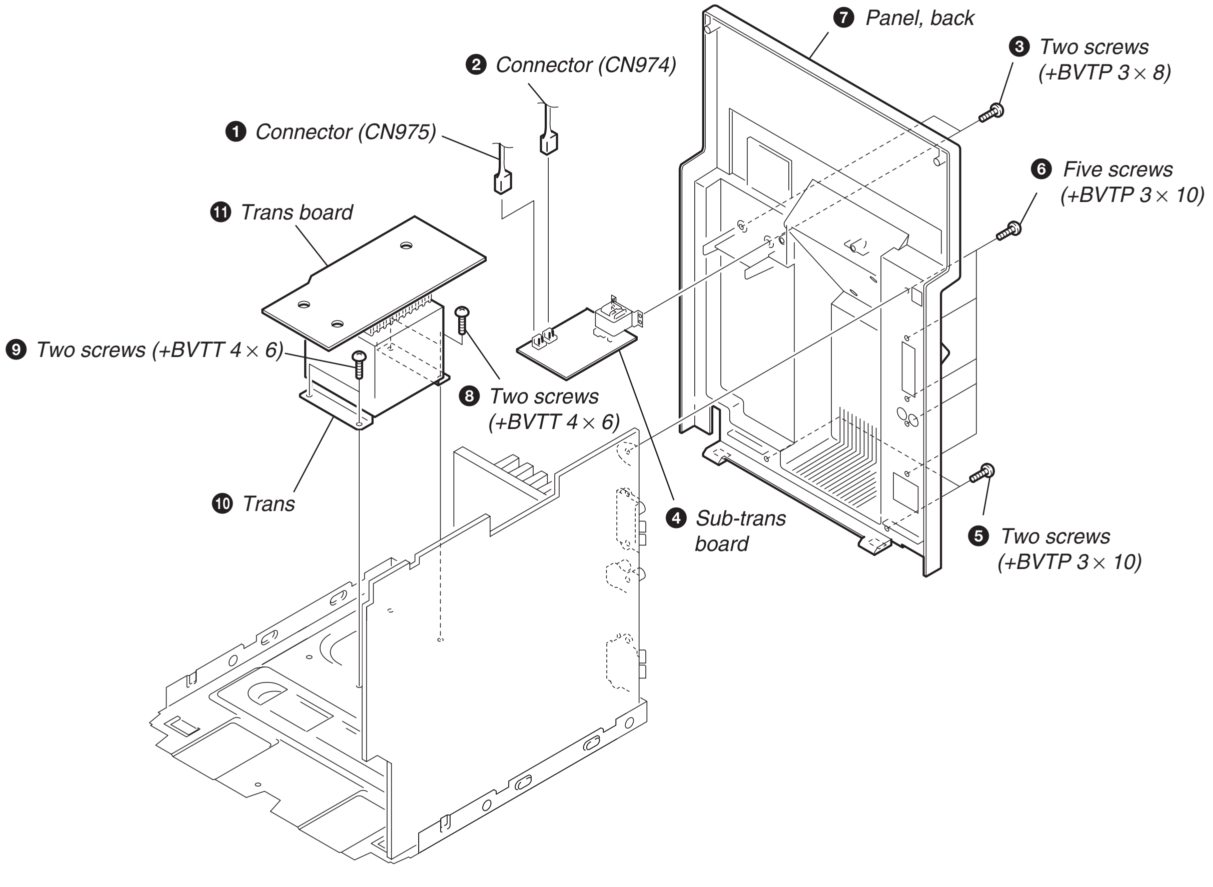
3-5. PANEL BOARD


❽ Three claws
❻
❼ Two screws (+BVTP 3 × 10)
❾ CD Switch board
⓬ Panel board
❷ Two screws (+BVTP 2.6 × 8)
⓫ Five claws
❸ Two bosses & four pins
❺ FR knob
❹ Bracket (FR)
❶ Knob (Volume)

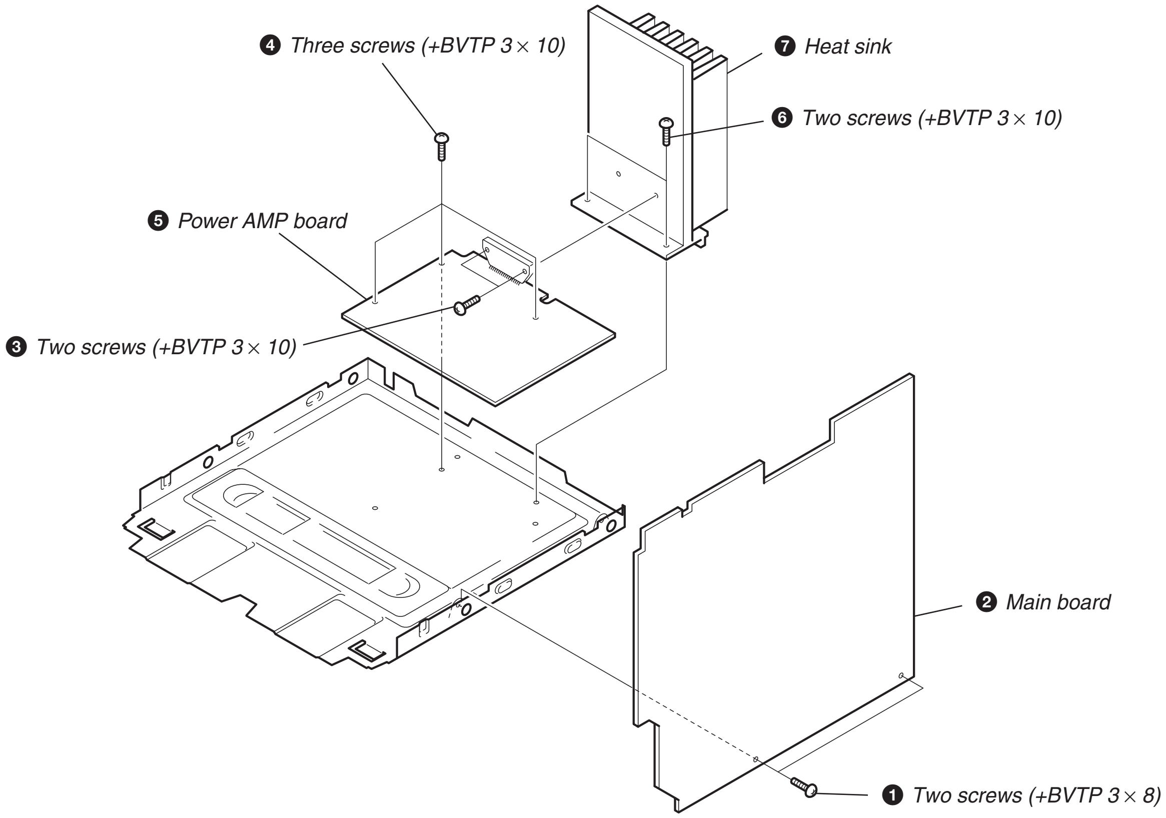
❿ *Cut the eleven melted-connection points with a cutting plier.*

Note: *When attching the panel board, refer to "Service Note" on page 4.*

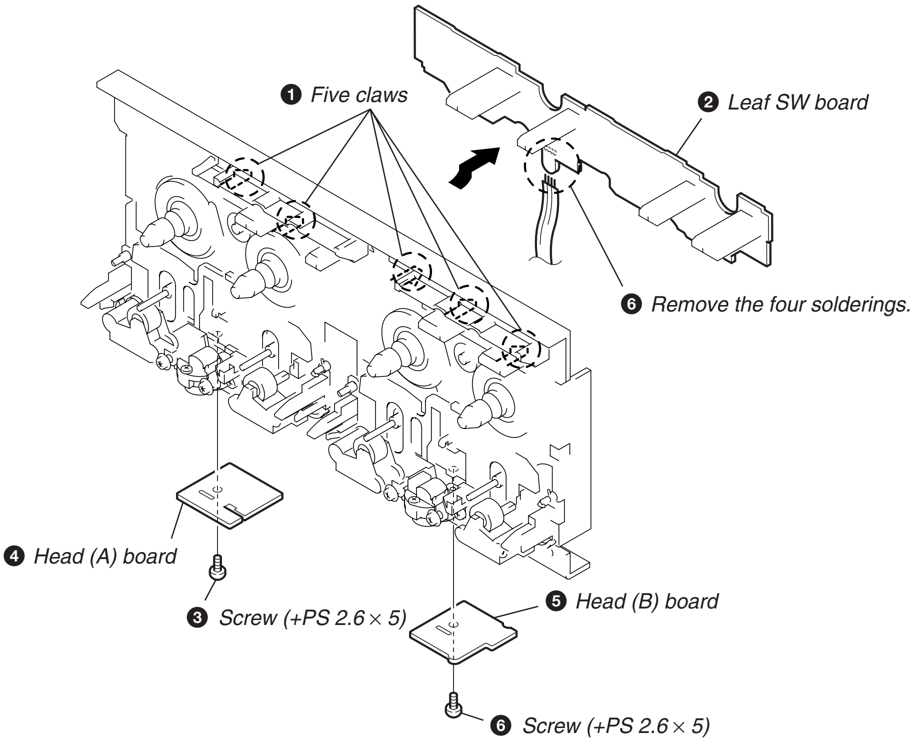
3-6. SUB-TRANS BOARD AND TRANS BOARD


❼ Panel, back
❸ Two screws (+BVTP 3 × 8)
❷ Connector (CN974)
❶ Connector (CN975)
❻ Five screws (+BVTP 3 × 10)
⓫ Trans board
❾ Two screws (+BVTT 4 × 6)
❽ Two screws (+BVTT 4 × 6)
❿ Trans
❹ Sub-trans board
❺ Two screws (+BVTP 3 × 10)

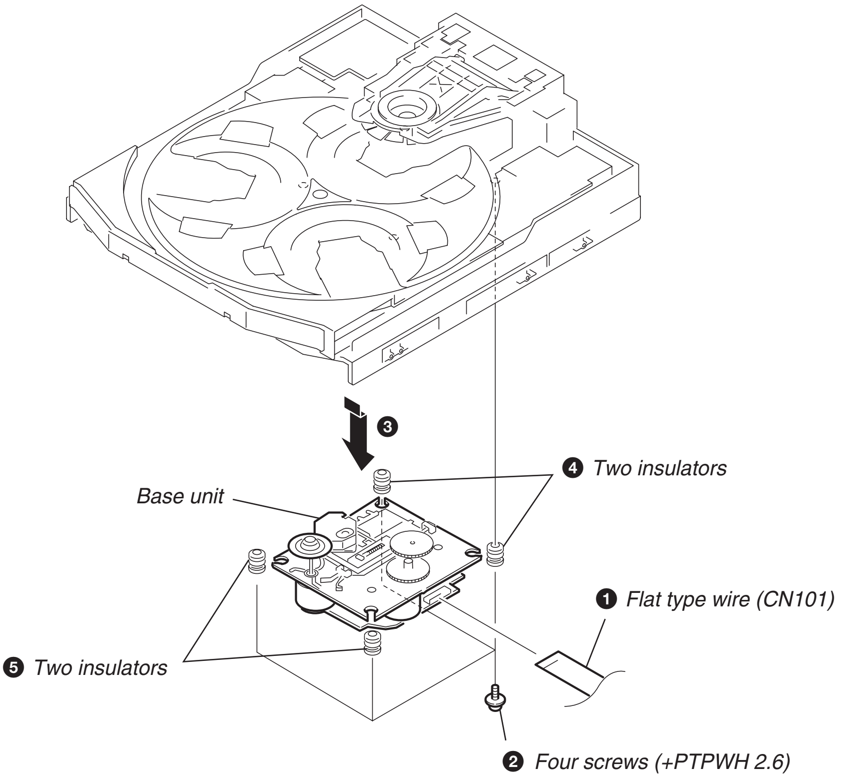
3-7. MAIN BOARD AND AMP BOARD


❹ Three screws (+BVTP 3 × 10)
❼ Heat sink
❻ Two screws (+BVTP 3 × 10)
❺ Power AMP board
❸ Two screws (+BVTP 3 × 10)
❷ Main board
❶ Two screws (+BVTP 3 × 8)

3-8. LEAF SW BOARD, HEAD (A) BOARD AND HEAD (B) BOARD

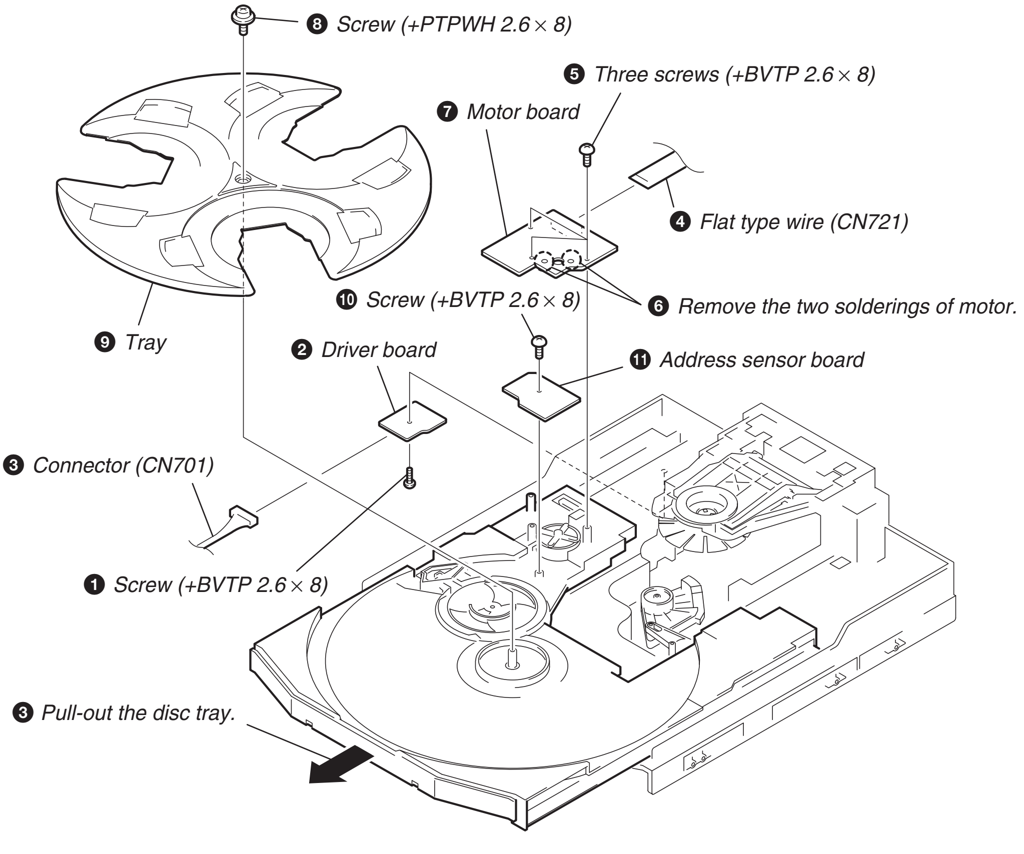

❶ Five claws
❷ Leaf SW board
❻ Remove the four solderings.
❹ Head (A) board
❸ Screw (+PS 2.6 × 5)
❺ Head (B) board
❻ Screw (+PS 2.6 × 5)

3-9. BASE UNIT



❸
Base unit
❹ Two insulators
❶ Flat type wire (CN101)
❺ Two insulators
❷ Four screws (+PTPWH 2.6)

3-10. DRIVER BOARD, MOTOR BOARD AND ADDRESS SENSOR BOARD



❽ Screw (+PTPWH 2.6 × 8)
❺ Three screws (+BVTP 2.6 × 8)
❼ Motor board
❹ Flat type wire (CN721)
❿ Screw (+BVTP 2.6 × 8)
❻ Remove the two solderings of motor.
❾ Tray
❷ Driver board
⓫ Address sensor board
❸ Connector (CN701)
❶ Screw (+BVTP 2.6 × 8)
❸ Pull-out the disc tray.

SECTION 4
TEST MODE

[MC Cold Reset]

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Press three buttons ■, ENTER, and I/⏻ simulta-neously.
2. The fluorescent indicator tube displays “COLD RESET” and the set is reset.

[CD Ship Mode]

- This mode moves the pickup to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press I/⏻ button to turn the set ON.
2. Press CD button and I/⏻ button simultaneously.
3. After the "STANDBY" display blinks six times, a message “LOCK” is displayed on the fluorescent indicator tube, and the CD ship mode is set.

[MC Hot Reset]

- This mode resets the set with the preset data kept stored in the memory. The hot reset mode functions same as if the power cord is plugged in and out.

Procedure:

1. Press three buttons ■, ENTER, and DISC 1 simultaneously.
2. The fluorescent indicator tube becomes blank instantaneously, and the set is reset.

[CD Service Mode]

- This mode can run the CD sled motor freely. Use this mode, for instance, when cleaning the pickup.

Procedure:

1. Press I/⏻ button to turn the set ON.
2. Select the function “CD”.
3. Press three buttons ■, ENTER, and OPEN/CLOSE simultaneously.
4. The CD service mode is selected.
5. With the CD in stop status, turn the shuttle knob clockwise to move the pickup to outside track, or turn the shuttle knob counter-clockwise to inside track.
6. To exit from this mode, perform as follows:
   1) Move the pickup to the most inside track.
   2) Press three buttons in the same manner as step 2.

Note:
- Always move the pickup to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
- Do not run the sled motor excessively, otherwise the gear can be chipped.

[VACS ON/OFF Mode]

- This mode is used to switch ON and OFF the VACS (Variable Attenuation Control System).

Procedure:

Press the ENTER and SPECTRUM buttons simultaneously. The message “VACS OFF” or “VACS ON” appears.

[Change-over of MW Tuner Step between 9 kHz and 10 kHz]

- A step of MW channels can be changed over between 9 kHz and 10 kHz.

Procedure:

1. Press I/⏻ button to turn the set ON.
2. Select the function “TUNER”, and press TUNER/BAND button to select the BAND “MW”.
3. Press I/⏻ button to turn the set OFF.
4. Press ENTER and I/⏻ buttons simultaneously, and the display of fluorescent indicator tube changes to “MW 9 k STEP” or “MW 10 k STEP”, and thus the channel step is changed over.

[GC Test Mode]

- This mode is used to check the software version, FL tube, LED, keyboard and VACS.

Procedure:

1. Press three buttons ■, ENTER, and DISC 2 simultaneously.
2. LEDs and fluorescent indicator tube are all turned on.
3. When you want to enter the software version display mode, press DISC 1. The model number and destination are displayed.
4. Each time DISC 1 is pressed, the display changes starting from MC version, GC version, VC version, CD version, CM version, ST version, TC version, TA version, TM version and BR version in this order, and returns to the model number and destination display.
5. When DISC 3 is pressed while the version numbers are being displayed except model number and destination, year, month and day of the software creation appear. When DISC 3 is pressed again, the display returns to the software version display. When DISC 1 is pressed while year, month and day of the software creation are being displayed, the year, month and day of creation of the software versions are displayed in the same order of version display.
6. Press DISC 2 button, and the key check mode is activated.
7. In the key check mode, the fluorescent indicator tube displays “KEY0 VOL0”. Each time a button is pressed, “KEY” value increases. However, once a button is pressed, it is no longer taken into account.
   “VOL” value increases like 1, 2, 3 ... if rotating VOLUME knob in “+” direction, or it decreases like 0, 9, 8 ... if rotating in “–” direction.
8. Also when DISC 3 is pressed after lighting of all LEDs and FL tubes, value of VACS appears.
9. To exit from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

[MC Test Mode]

• This mode is used to check operations of the respective sections of Amplifier, Tuner, CD and Tape.

Procedure:

1. Press the I/⏻ button to turn on the set.
2. Press the three buttons of ■, ENTER and DISC 3 simultaneously.
3. A message “TEST MODE” appears on the FL display tube.
4. When △ (CURSOR UP) button is pressed, GEQ increases to its maximum and a message “GEQ ALL MA” appears.
5. When ∇ (CURSOR DOWN) button is pressed, GEQ decreases to its minimum and a message “GEQ ALL M1” appears.
6. When ◁ (CURSOR LEFT) or ▷ (CURSOR RIGHT) button is pressed, GEQ is set to flat and a message “GEQ FLAT” appears.
7. When the VOLUME control knob is turned clockwise even slightly, the sound volume increases to its maximum and a message “VOLUME MAX” appears for two seconds, then the display returns to the original display.
8. When the VOLUME control knob is turned counter-clockwise even slightly, the sound volume decreases to its minimum and a message “VOLUME MIN” appears for two seconds, then the display returns to the original display.
9. In the test mode, the default-preset channel is called even when the TUNER is selected and an attempt is made to call the preset channel that has been stored in memory, by operating the Shuttle knob. (It means that the memory is cleared.)
10. When CD is selected and the EDIT button is pressed, the disc that is being chucked at this moment becomes the default setting. It means that the default disc only is accessed when any other discs are selected even though the display indication changes accordingly. At the same time, the DISK SKIP EXCHANGE and OPEN/CLOSE cannot be accepted. (It means that the tray motor and the turntable motor are disabled of their operation.)
11. When a tape is inserted in Deck B and recording is started, the input source function selects VIDEO automatically.
12. When ■ button is pressed to stop recording, the Tape (Deck) B is selected and tape is rewound using the Shuttle knob, tape is rewound, tape is stops at around the record-starting position and playback of the recorded portion of the tape is started. If PAUSE is inserted even once during recording, tape is rewound to the position around the PAUSE position and is played back.
13. When the CD SYNC HI-DUB Button is press during playback of Deck B, either normal speed or high speed can be selected by this button.
14. Select the desired loop by pressing the PLAY MODE button. Insert a test tape AMS-110A or AMS-RO to Deck A.
15. Press the SPECTRUM button to enter the AMS test mode.
16. After a tape is rewound first, the FF AMS is checked, and the mechanism is shut off after detecting the AMS signal twice.
17. Then the REW AMS is checked and the mechanism is shut off after detecting the AMS signal twice.
18. When the check is complete, a message of either OK or NG appears.
19. When you want to exit this mode, press the I/⏻ button twice. The cold reset is enforced at the same time.

[Aging Mode]

This mode can be used for operation check of CD section and tape deck section.

- If an error occurred:
  The aging operation stops and display status.
- If no error occurs:
  The aging operation continues repeatedly.

1. Operating method of Aging Mode

Turn on the main power and select “CD” of the function.

1) Set a disc in DISC1 tray. Select ALL DISC CONTINUE, and REPEAT OFF.
2) Load the tapes recording use into the decks A and B respectively.
3) Press three buttons ■, ENTER, and DISC SKIP/EX-CHANGE simultaneously.
4) Aging operations of CD and tape are started at the same time.
5) To exit the aging mode, perform [MC Cold Reset].

3. Aging Mode in CD section

1) Display state

- No error occurs

Display

AGING****

Note:

**** : Number of aging operations

Error display

E ** □ ## $$ %%
① ② ③ ④ ⑤

① **	The error No. 00 indicates the newest error. As the error No. increases, it means the older error. When you want to retrieve the error history, press the PLAY MODE button in the case of mechanism error. Or press the REPEAT button in the case of NO DISC error.	
② □	M: Mechanism error	D: No disc error
③ ##	Don’t care	01: FOCUS ERROR 02: GFS ERROR 03: SETUP ERROR
④ $$	High order digits only D: Stopped during closing due to problems other than mechanism. E: Stopped during opening due to problems other than mechanism. C: Stopped during chucking due to problems other than mechanism. F: Stopped during EX-opening due to problems other than mechanism.	01: NO DISC judgment without chucking retry 02: NO DISC judgment after chucking retry
⑤ %%	Emergency related errors (High order digits only) 1: Stopped during chuck-up 2: Stopped during chuck-down 3: Time out by EX-OPEN 5: Time out by EX-CLOSE	Status at the time of NO DISC judgment (High order digits only) 1: STOP 2: SETUP 3: TOC READ 4: ACCESS 5: PLAY BACK 6: PAUSE 7: MANUAL SEARCH (PLAY) 8: MANUAL SEARCH (PAUSE)

- When the buttons ■, ENTER and DISC 1 are pressed simultaneously, number of time of the mechanism error and the NO DISC error can be checked.
  Display: EMC**EDC**
  **: Number of times of error (Maximum three times)
  EMC: Mechanism error
  EDC: NO DISC error

- When aging operation is complete, be sure to perform the MC Cold Reset to reset the error history.

2) Operation during aging mode

In the aging mode, the program is executed in the following sequence.

(1) The disc tray opens and closes.
(2) The mechanism accesses DISC 2 and makes an attempt to read TOC. However, since there are no discs, a message “CD2 NO DISC” appears.
(3) The mechanism accesses DISC 3 and a message “CD3 NO DISC” appears.
(4) The disc tray turns to select a disc1.
(5) A disc is chucked.
(6) TOC of disc is read.
(7) The pickup accesses to the track 1, and playing 2 seconds.
(8) The pickup accesses to the last track, and playing 2 seconds.
(9) Every time when an aging operation of step 1 to step 8 is complete, the display “AGING$\boxed{*}\boxed{*}\boxed{*}\boxed{*}$” value increases as the number of aging operations is counted up.
(10) Returns to step 1.

3. Aging Mode in Tape Deck section

1) Display state

- No error occurs
  Display action now
- Error occurred
  Display action last time

NO.	Display action	Action contents	Final timing
1	TAPE A AG-1	Rewind the TAPE A, B	The top of tape
2	TAPE A AG-2	FWD play the TAPE A	2 minutes playing
3	TAPE A AG-3	F.F. the TAPE A	20 second FF or the end of tape
4	TAPE A AG-4	REV play the TAPE A	2 minutes playing
5	TAPE A AG-5	Rewind the TAPE A	The top of tape
6	TAPE B AG-2	FWD play the TAPE B	2 minutes playing
7	TAPE B AG-3	F.F. the TAPE B	20 second FF or the end of tape
8	TAPE B AG-4	REV play the TAPE B	2 minutes playing
9	TAPE B AG-5	Rewind the TAPE B	The top of tape

2) Operation during aging mode

In the aging mode, the program is executed in the following sequence.

(1) Rewind is executed up to the top of tape A and B.
(2) A tape on FWD side is played for 2 minutes.
(3) FF is executed up to either made for 20 second or the end of tape.
(4) A tape is reversed, and the tape on REV side is played for 2 minutes.
(5) Rewind is executed up to the top of tape.
(6) Returns to step 2, and repeat steps from 2 to 5.

[Function Change Mode]

* elect either VIDEO or MD of the external FUNCTION input.

Procedure:

1. Turn on the power.
2. Press the two buttons $\boxed{\text{ENTER}}$ and $\boxed{\text{I/⏻}}$ at the same time.
   The main power is turned on and the other function of the previous function is selected and displayed. “MD” or “VIDEO”.

SECTION 5
MECHANICAL ADJUSTMENTS

Precaution

1. Clean the following parts with a denatured alcohol-moistened swab:

record/playback heads	pinch rollers
erase head	rubber belts
capstan	idlers

2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	31 to 71 g • cm (0.43 – 0.98 oz • inch)
FWD back tension	CQ-102C	2 to 6 g • cm (0.02 – 0.08 oz • inch)
REV	CQ-102RC	31 to 71 g • cm (0.43 – 0.98 oz • inch)
REV back tension	CQ-102RC	2 to 6 g • cm (0.02 – 0.08 oz • inch)
FF/REW	CQ-201B	71 to 143 g • cm (0.98 – 1.99 oz • inch)
FWD tension	CQ-403A	100 g or more (3.53 oz or more)
REV tension	CQ-403R	100 g or more (3.53 oz or more)

SECTION 6
ELECTRICAL ADJUSTMENTS

DECK SECTION 0 dB=0.775 V

1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjust.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
7. Switches and controls should be set as follows unless otherwise specified.

- Test Tape

Tape	Signal	Used for
P-4-A100	10 kHz, –10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment
P-4-L300	315 Hz, 0 dB	Level Adjustment

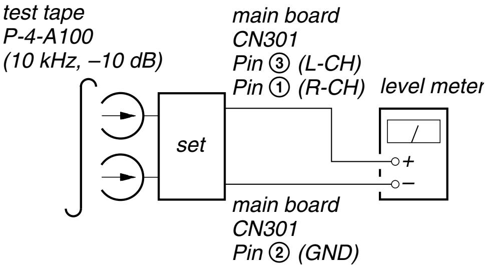
Record/Playback Head Azimuth Adjustment

DECK A **DECK B**

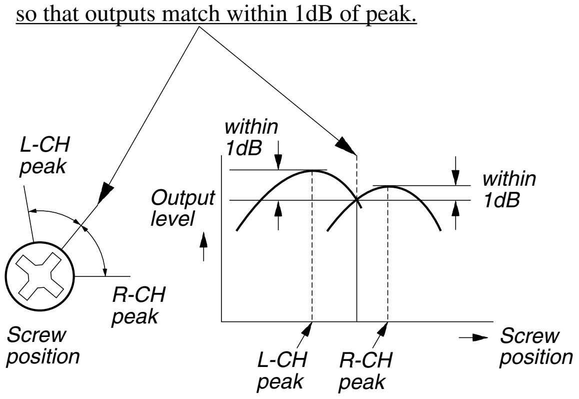
Note: Perform this adjustments for both decks

Procedure:

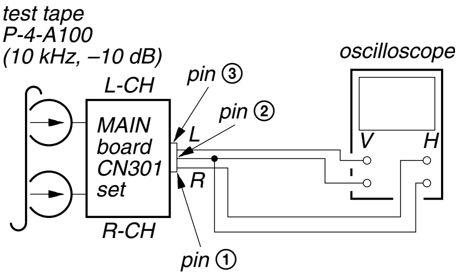
1. Mode: Playback

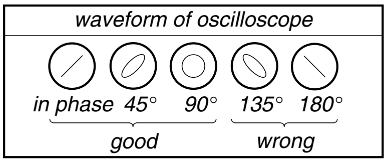


2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1dB of peak.


L-CH
peak
Screw
position
R-CH
peak
within
1dB
Output
level
within
1dB
L-CH
peak
R-CH
peak
Screw
position

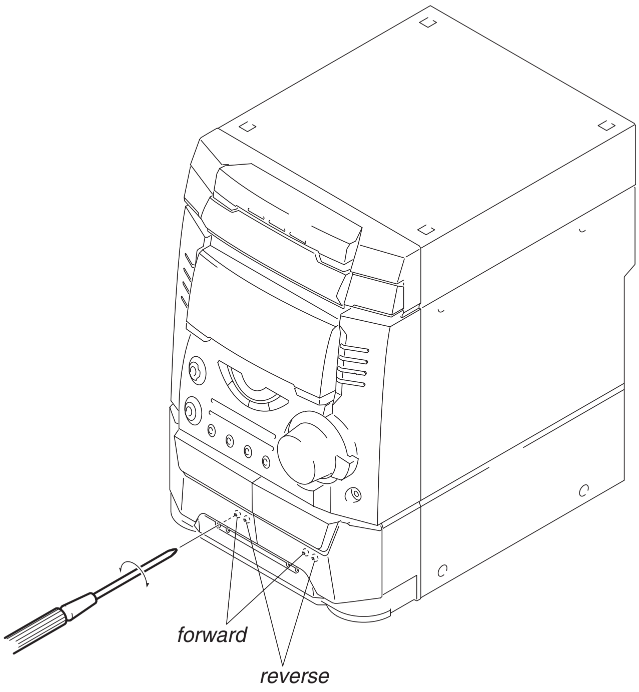
3. Mode: Playback


test tape
P-4-A100
(10 kHz, –10 dB)
L-CH
MAIN
board
CN301
set
R-CH
pin ③
pin ②
L
R
pin ①
oscilloscope
V
H


waveform of oscilloscope
in phase
45°
90°
135°
180°
good
wrong

4. After the adjustments, apply suitable locking compound to the pats adjusted.

Adjustment Location: Playback Head (Deck A).
Record/Playback/Erase Head (Deck B).


forward
reverse

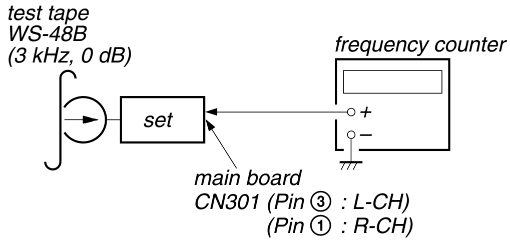
Tape Speed Adjustment DECK B

Note: Start the Tape Speed adjustment as below after setting to the test mode.
In the test mode, the tape speed is high during pressing the SD SYNC HI-DUB button.

Procedure:

1. Turn the power switch on.
2. Press the ■ button, ENTER button and DISC 3 button simultaneously.
   (The "TEST MODE" on the fluorescent indicator tube display while in the test mode.)
   To exit from the test mode, press the I/⏻ button.

Mode: Playback


test tape
WS-48B
(3 kHz, 0 dB)
set
frequency counter
+
–
main board
CN301 (Pin ③ : L-CH)
(Pin ① : R-CH)

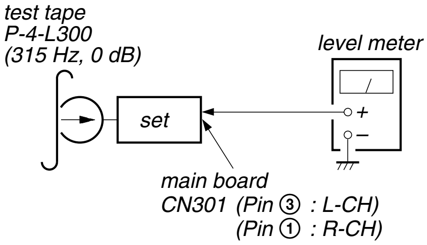
1. Insert the WS-48B into the deck B.
2. Press the ◁▷ button on the deck B.
3. Press the SD SYNC HI-DUB button in playback mode.
   Then at HIGH speed mode.
4. Adjust RV1001 on the LEAF SW board do that frequency counter reads 6,000 ± 30 Hz.
5. Press the SD SYNC HI-DUB button.
   Then back to NORMAL speed mode.
6. Adjust RV1002 on the LEAF SW board so that frequency counter reads 3,000 ± 15 Hz.

Adjustment Location: LEAF SW board

Playback level Adjustment DECK A DECK B

Procedure:

Mode: Playback


test tape
P-4-L300
(315 Hz, 0 dB)
set
level meter
+
–
main board
CN301 (Pin ③ : L-CH)
(Pin ① : R-CH)

Deck A is RV302 (L-CH) and RV352 (R-CH), Deck B is RV303 (L-CH) and RV353 (R-CH) so that adjustment within adjustment level as follows.

Adjustment Level:

CN301 PB level: 301.5 to 338.3 mV (–8.2 to –7.2 dB) level difference between the channels: within ±0.5 dB

Adjustment Location: MAIN board

Sample Volue of Wow and Flutter: 0.3% or less W. RMS
(WS-48B)

REC Bias Adjustment DECK B

Procedure:

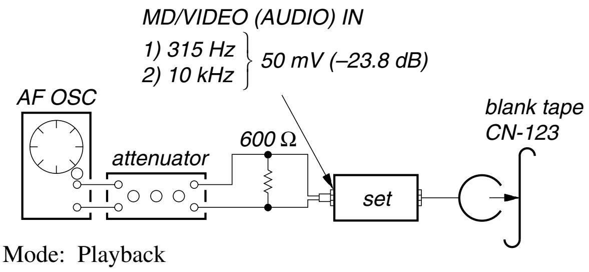
INTRODUCTION

When set to the test mode performed in Tape Speed Adjustment, when the tape is rewound after recording, the “REC memory mode” which rewinds only the recorded portion and playback is set.

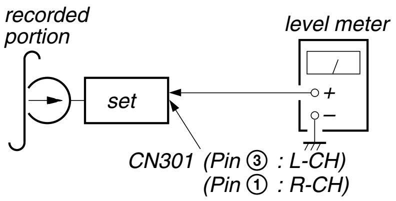
This “REC memory mode” is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO.

(If do not operation of stopped from recording complete, and rotette of shuttle knob then rewind to recording start position.)

1. Press MD/VIDEO button to select VIDEO. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B.
3. After press REC PAUSE/START button, press REC PAUSE/START button, then recording start.
4. Mode: Record


MD/VIDEO (AUDIO) IN
1) 315 Hz
2) 10 kHz
50 mV (–23.8 dB)
AF OSC
attenuator
600 Ω
set
blank tape
CN-123

5. Mode: Playback


recorded portion
set
level meter
+
–
CN301 (Pin ③ : L-CH)
(Pin ① : R-CH)

6. Confirm playback the signal recorded in step 3 become adjustable level as follows.
   If these levels do not adjustable level, adjustment the RV304 (L-CH) and RV354 (R-CH) on the AUDIO board to repeat steps 4 and 5.

Adjustable level: Playback output of 315 Hz to playback output of 10 kHz: ±1.0 dB

Adjustment Location: MAIN board

REC Level Adjustment DECK B

Procedure:

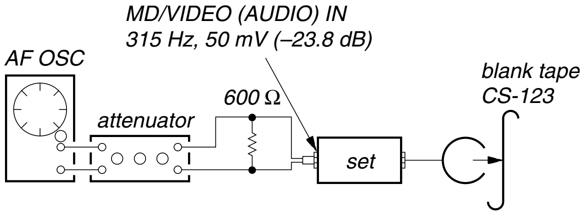
INTRODUCTION

When set to the test mode performed in Tape Speed Adjustment, when the tape is rewound after recording, the “REC memory mode” which rewinds only the recorded portion and playback is set.

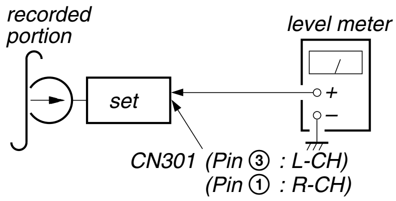
This “REC memory mode” is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO.

(If do not operation of stopped from recording complete, and rotate of shuttle knob then rewind to recording start position.)

1. Press MD/VIDEO button to select VIDEO. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B.
3. After press REC PAUSE/START button, press REC PAUSE/START button, then recording start.
4. Mode: Record


MD/VIDEO (AUDIO) IN
315 Hz, 50 mV (–23.8 dB)
AF OSC
attenuator
600 Ω
set
blank tape
CS-123

5. Mode: Playback


recorded portion
set
level meter
+
–
CN301 (Pin ③ : L-CH)
(Pin ① : R-CH)

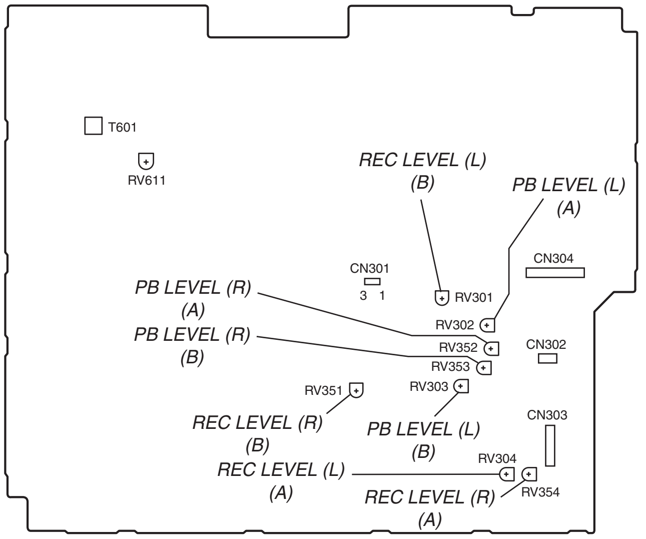
6. Confirm playback the signal recorded in step 3 become adjustable level as follows.
   If these levels do not adjustable level, adjustment the RV301 (L-CH) and RV351 (R-CH) on the MAIN board to repeat steps 4 and 5.

Adjustable level:

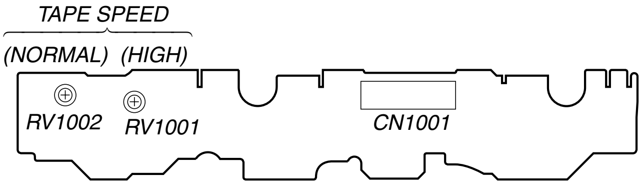
CN301 PB level: 47.2 to 53.0 mV (–24.3 to –23.3 dB)

Adjustment Location: MAIN board

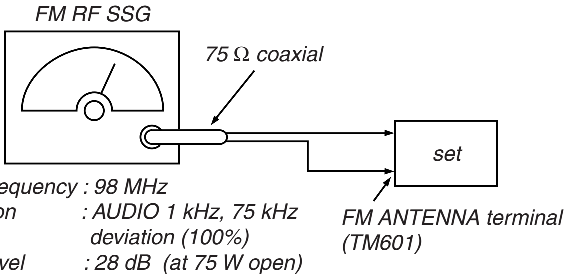
[MAIN BOARD] (Component Side)


T601
RV611
REC LEVEL (L) (B)
PB LEVEL (L) (A)
CN304
CN301
3 1
RV301
PB LEVEL (R) (A)
PB LEVEL (R) (B)
RV302
RV352
CN302
RV353
RV351
RV303
REC LEVEL (R) (B)
PB LEVEL (L) (B)
CN303
RV304
REC LEVEL (L) (A)
REC LEVEL (R) (A)
RV354

[LEAF SW BOARD] (Component Side)


TAPE SPEED
(NORMAL) (HIGH)
RV1002
RV1001
CN1001

FM Tuned Level Adjustment


FM RF SSG
75 Ω coaxial
set
FM ANTENNA terminal
(TM601)

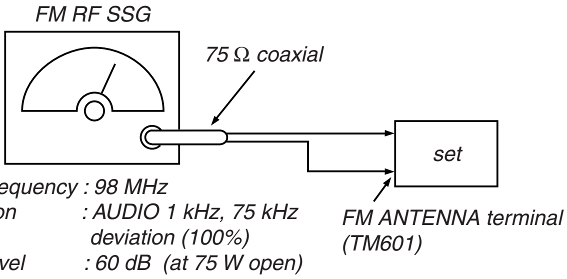
Carrier frequency : 98 MHz
Modulation : AUDIO 1 kHz, 75 kHz deviation (100%)
Output level : 28 dB (at 75 W open)

Procedure:

1. Supply a 28 dB 98 MHz signal from the ANTENNA terminal.
2. Tune the set to 98 MHz.
3. Adjust RV611 to the point (moment) when the TUNED indicator will change from going off to going on.

Adjustment Location: MAIN board

Null Adjustment


FM RF SSG
75 Ω coaxial
set
FM ANTENNA terminal
(TM601)

Carrier frequency : 98 MHz
Modulation : AUDIO 1 kHz, 75 kHz deviation (100%)
Output level : 60 dB (at 75 W open)

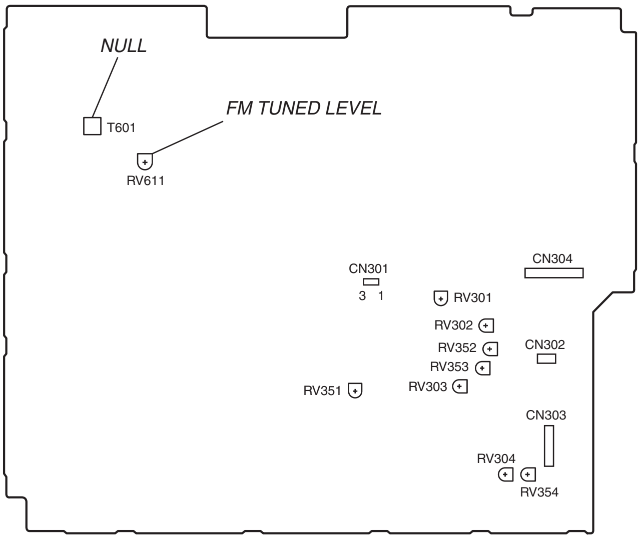
Procedure:

1. Supply a 60 dB 98 MHz signal from the ANTENNA terminal.
2. Tune the set to 98 MHz.
3. Measure voltage between pin 21 of IC 601. Adjust T601 ubtil the voltage becomes 0 V.

Adjustment Location: MAIN board

Adjustment Location

[MAIN BOARD] Component side

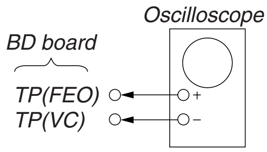

NULL
T601
FM TUNED LEVEL
RV611
CN301
3 1
CN304
RV301
RV302
RV352
RV353
RV303
RV351
CN302
CN303
RV304
RV354

CD SECTION

Note :

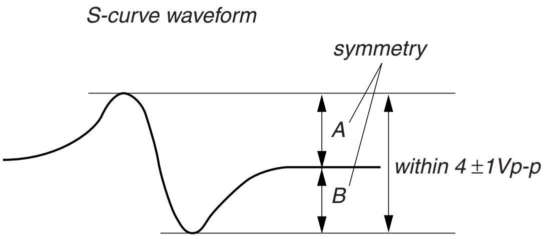
1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S-Curve Check


Oscilloscope
BD board
TP(FEO)
TP(VC)
+
−

Procedure :

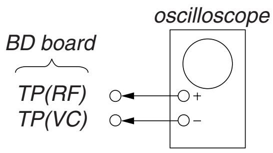
1. Connect oscilloscope to TP (FEO).
2. Connect between TP (FEI) and TP (VC) by lead wire.
3. Connect between TP (AGCCON) and TP (GND) by lead wire.
4. Turn Power switch on.
5. Load a disc (YEDS-18) and actuate the focus search. (In consequence of open and close the disc tray, actuate the focus search)
6. Confirm that the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 4 ±1 Vp-p.


S-curve waveform
symmetry
A
B
within 4 ±1Vp-p

7. After check, remove the lead wire connected in step 2 and 3.

Note :
- Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
- Take sweep time as long as possible and light up the brightness to obtain best waveform.

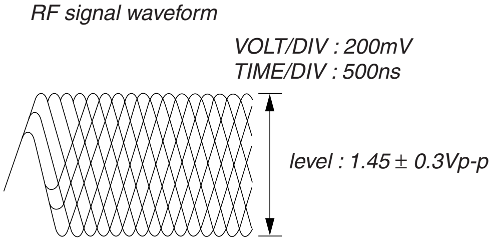
RF Level Check


oscilloscope
BD board
TP(RF)
TP(VC)
+
−

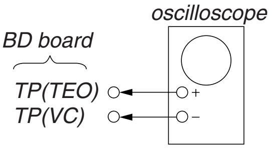
Procedure :

1. Connect oscilloscope to TP (RF).
2. Connect between TP (AGCCON) and TP (GND) by lead wire.
3. Turned Power switch on.
4. Load a disc (YEDS-18) and playback.
5. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.
6. After check, remove the lead wire connected in step 2.

Note : Clear RF signal waveform means that the shape “◊” can be clearly distinguished at the center of the waveform.

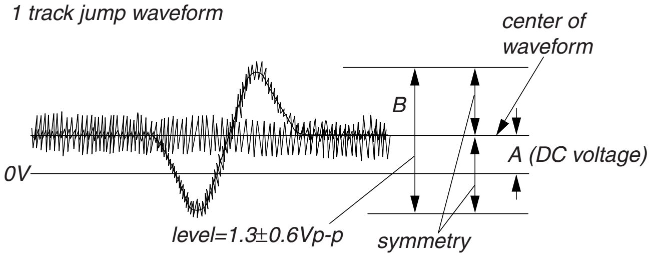


E-F Balance (1 Track jump) Check


oscilloscope
BD board
TP(TEO)
TP(VC)
+
–

Procedure :

1. Connect oscilloscope to TP (TEO) and TP (VC).
2. Turned Power switch on.
3. Load a disc (YEDS-18) and playback the number five track.
4. Press the ◁▷ button. (Becomes the 1 track jump mode.)
5. Confirm that the level B and A (DC voltage) on the oscilloscope waveform.



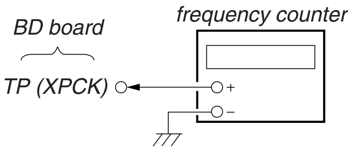
Specified level: $\frac{A}{B}$ × 100=less than ±22%

6. After check, remove the lead wire connected in step 1.

RF PLL Free-run Frequency Check

Procedure :

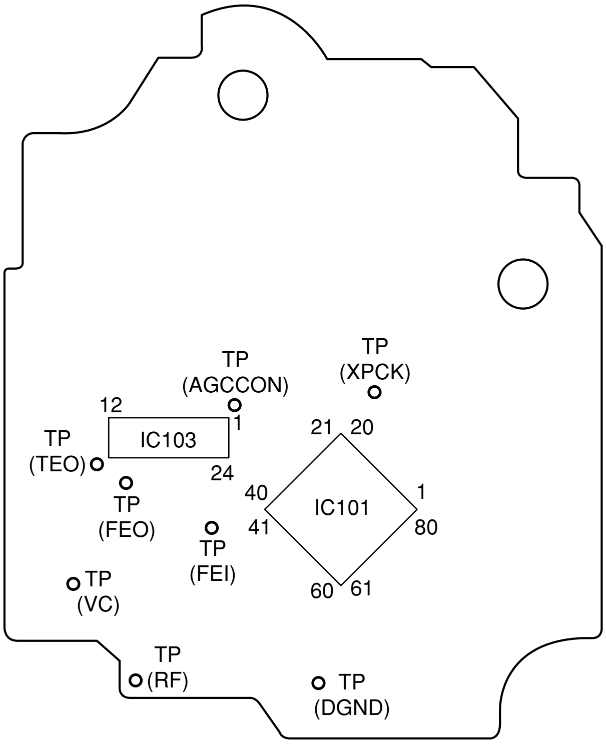
1. Connect frequency counter to test point (XPCK) with lead wire.


frequency counter
BD board
TP (XPCK)
+
–

2. Turned Power switch on.
3. Put the disc (YEDS-18) in to play the number five track.
   Confirm that reading on frequency counter is 4.3218MHz.

Adjustment Location:

[BD BOARD] (Conductor Side)


TP
(AGCCON)
TP
(XPCK)
12
1
IC103
24
21
20
TP
(TEO)
40
41
IC101
1
80
TP
(FEO)
TP
(FEI)
60
61
TP
(VC)
TP
(RF)
TP
(DGND)

SECTION 7
DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

Note on Schematic Diagram:

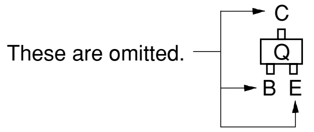
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $^1/_4$ W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

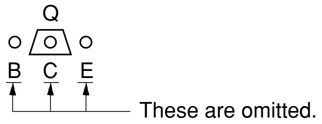
Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- **B+** : B+ Line.
- **B–** : B– Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - ⇨ : FM
  - ➡ : AM
  - ⊐ : PB (DECK A)
  - ▷ : PB (DECK B)
  - ⇛ : REC (DECK B)
  - ⇨ : CD
  - ⇛ : digital out
- Abbreviation
  - CND : Canadian model
  - AUS : Australian model
  - G : German model
  - AED : North European model
  - EA : Saudi Arabia model
  - MY : Malaysia model
  - SP : Singapore model
  - TH : Thai model
  - TW : Taiwan model
  - KR : Korea model
  - MX : Mexican model
  - AR : Argentina model

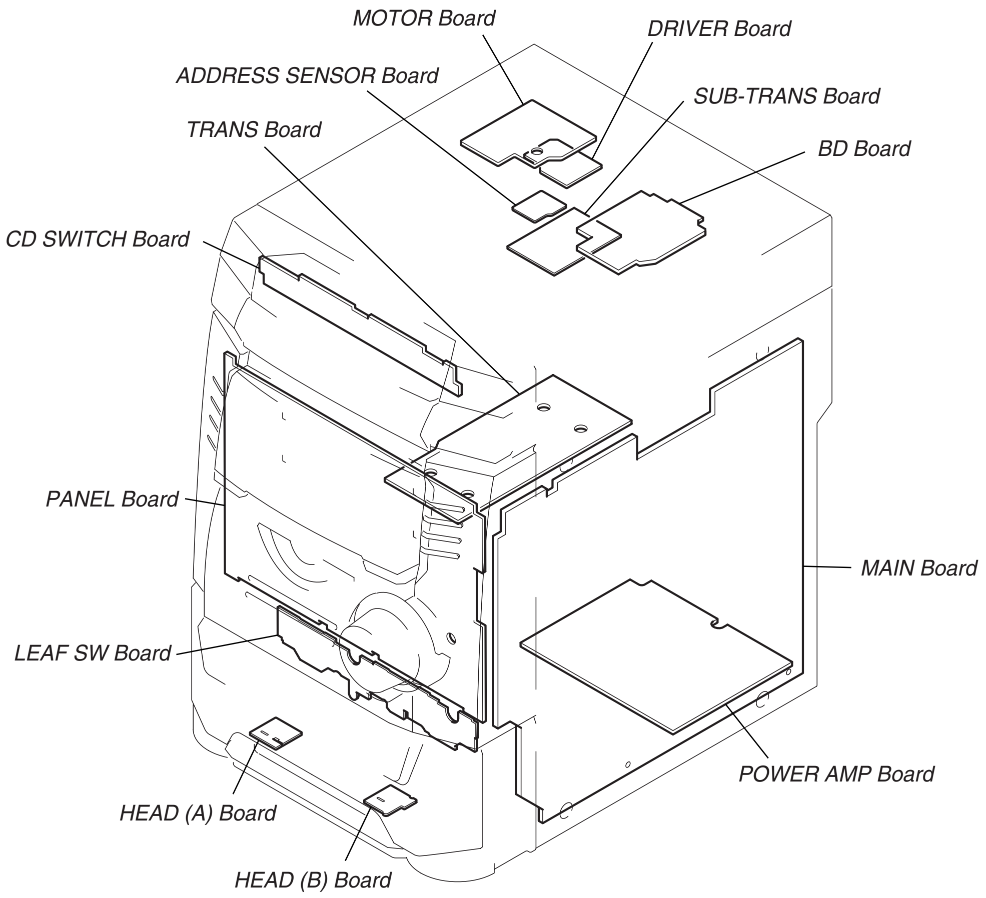
Note on Printed Wiring Boards:

- o——— : parts extracted from the component side.
- ▨ : Pattern from the side which enables seeing.
- Indication of transistor.


These are omitted.
C
Q
B E


Q
B C E
These are omitted.

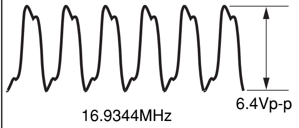
7-1. CIRCUIT BOARD LOCATION


MOTOR Board
DRIVER Board
ADDRESS SENSOR Board
SUB-TRANS Board
TRANS Board
BD Board
CD SWITCH Board
PANEL Board
MAIN Board
LEAF SW Board
POWER AMP Board
HEAD (A) Board
HEAD (B) Board

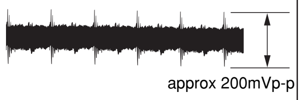
• WAVEFORMS

– BD BOARD –

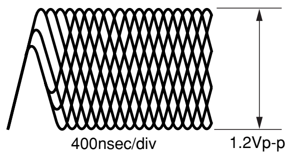
① IC101 (67)
CD PLAY MODE



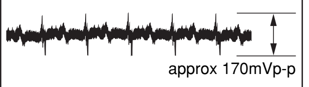
③ IC101 ㊶
CD PLAY MODE



② IC101 (51)
CD PLAY MODE

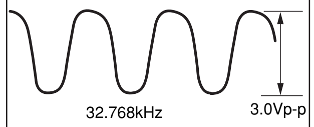


④ IC101 ㊴
CD PLAY MODE

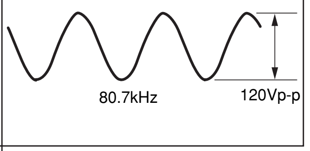


– MAIN BOARD –

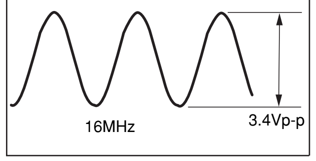
① IC401 ⑪
STOP MODE



③ T301 ④
TAPE B REC MODE

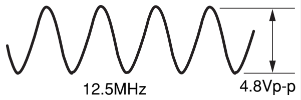


② IC401 ⑬
STOP MODE



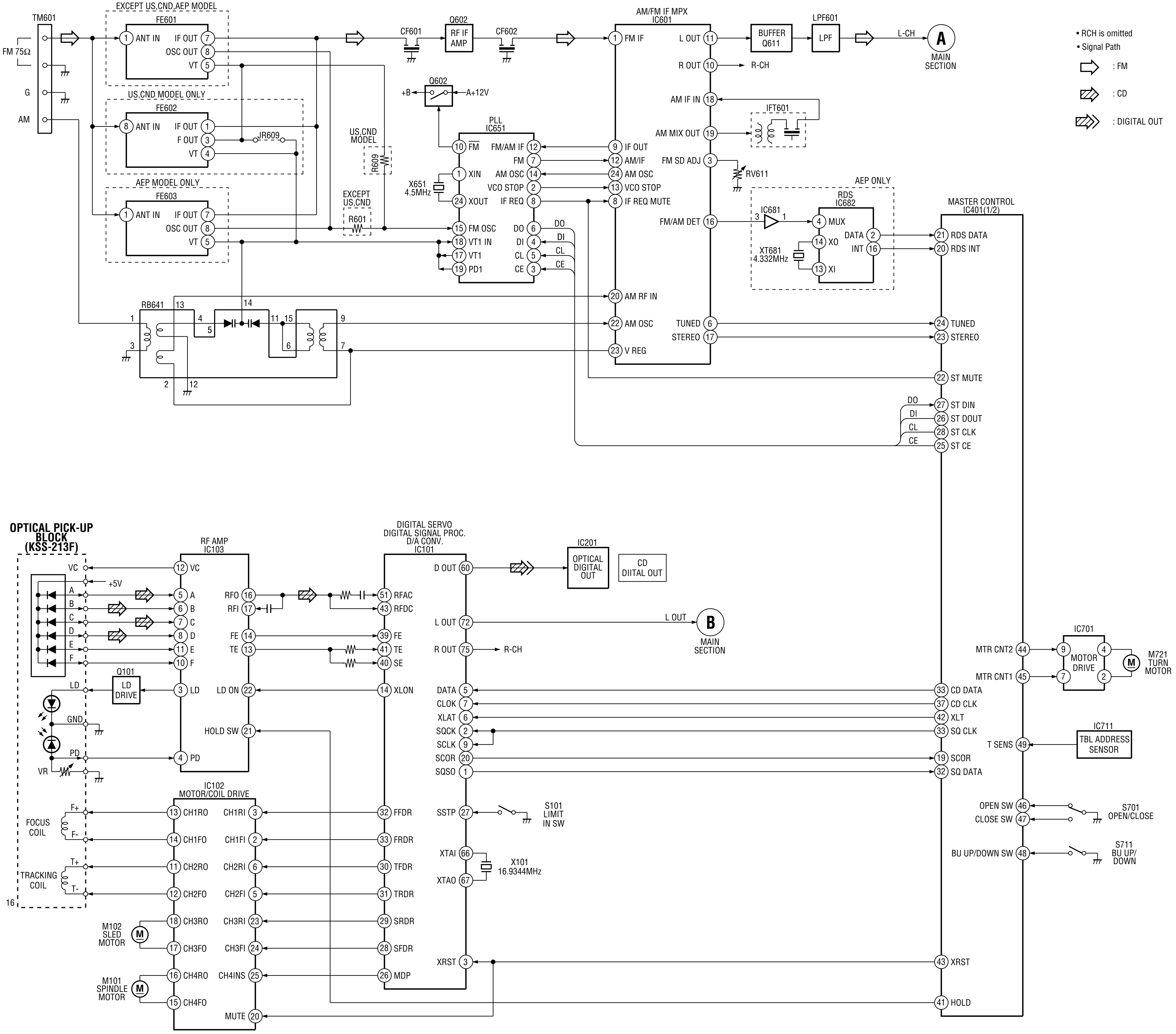
– PANEL BOARD –

① IC601 (91)
STOP MODE



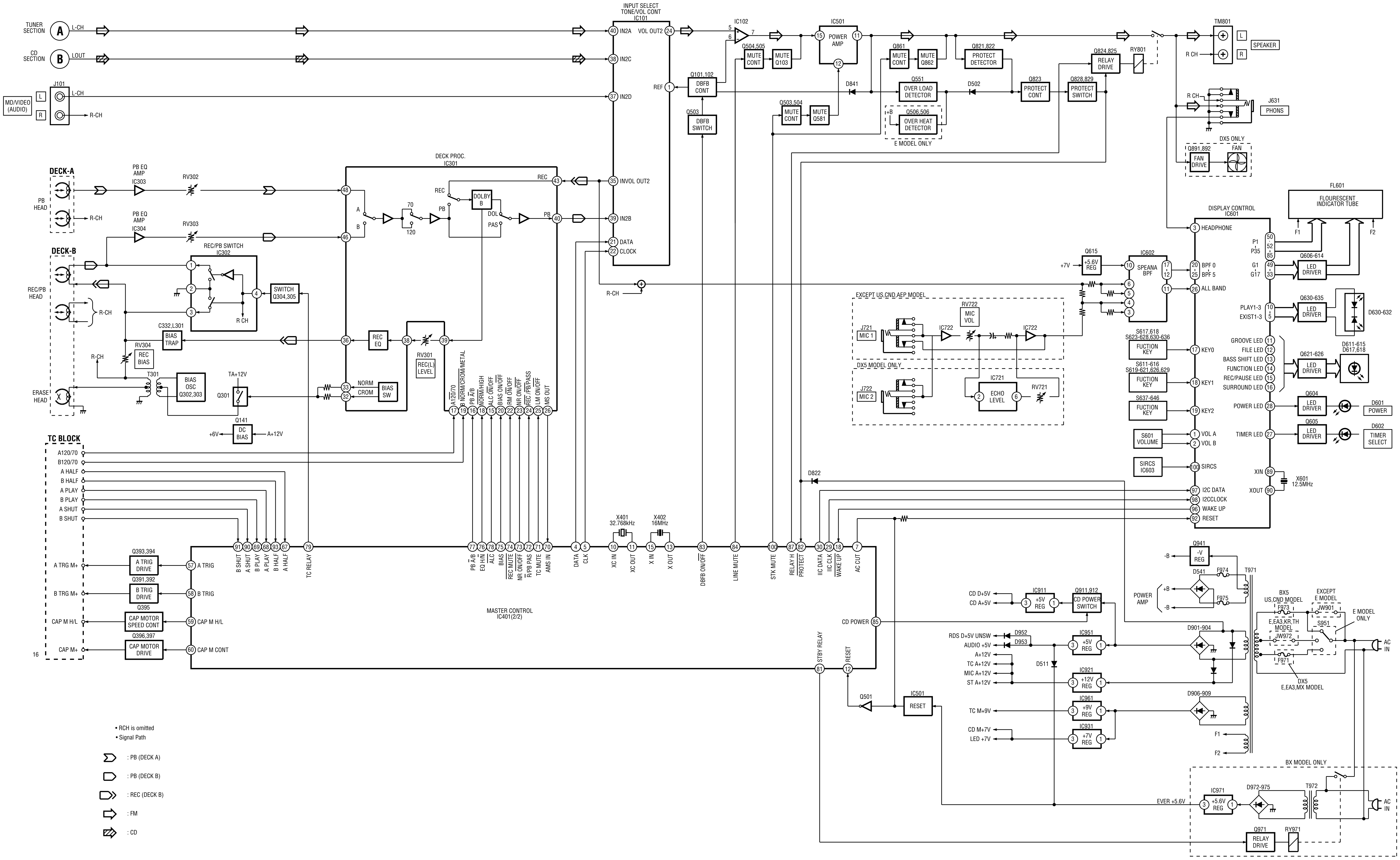
7-2. BLOCK DIAGRAMS

TUNER/CD SECTION



• RCH is omitted
• Signal Path
: FM
: CD
: DIGITAL OUT
TM601
FM 75Ω
G
AM
EXCEPT US,CND,AEP MODEL
FE601
ANT IN
IF OUT
OSC OUT
VT
US,CND MODEL ONLY
FE602
F OUT
JR609
AEP MODEL ONLY
FE603
US,CND MODEL
R609
EXCEPT US,CND
R601
CF601
Q602
RF IF AMP
CF602
+B
A+12V
PLL
IC651
FM
FM/AM IF
XIN
AM OSC
VCO STOP
XOUT
IF REQ
FM OSC
VT1 IN
VT1
PD1
DO
DI
CL
CE
X651
4.5MHz
AM/FM IF MPX
IC601
FM IF
L OUT
R OUT
R-CH
AM IF IN
AM MIX OUT
FM SD ADJ
RV611
IFT601
IF OUT
AM/IF
IF REQ MUTE
FM/AM DET
AM RF IN
AM OSC
V REG
TUNED
STEREO
BUFFER
Q611
LPF601
LPF
L-CH
A
MAIN SECTION
AEP ONLY
RDS
IC682
IC681
MUX
XO
XI
DATA
INT
XT681
4.332MHz
RB641
MASTER CONTROL
IC401(1/2)
RDS DATA
RDS INT
TUNED
STEREO
ST MUTE
ST DIN
ST DOUT
ST CLK
ST CE
OPTICAL PICK-UP BLOCK (KSS-213F)
VC
+5V
A
B
C
D
E
F
LD
GND
PD
VR
Q101
LD DRIVE
FOCUS COIL
F+
F-
TRACKING COIL
T+
T-
RF AMP
IC103
RFO
RFI
FE
TE
LD ON
HOLD SW
IC102
MOTOR/COIL DRIVE
CH1RO
CH1FO
CH2RO
CH2FO
CH3RO
CH3FO
CH4RO
CH4FO
CH1RI
CH1FI
CH2RI
CH2FI
CH3RI
CH3FI
CH4INS
MUTE
M102
SLED MOTOR
M101
SPINDLE MOTOR
DIGITAL SERVO
DIGITAL SIGNAL PROC.
D/A CONV.
IC101
RFAC
RFDC
SE
XLON
FFDR
FRDR
TFDR
TRDR
SRDR
SFDR
MDP
D OUT
L OUT
R OUT
DATA
CLOK
XLAT
SQCK
SCLK
SCOR
SQSO
SSTP
XTAI
XTAO
XRST
IC201
OPTICAL DIGITAL OUT
CD DIITAL OUT
B
MAIN SECTION
S101
LIMIT IN SW
X101
16.9344MHz
MTR CNT2
MTR CNT1
CD DATA
CD CLK
XLT
SQ CLK
T SENS
SCOR
SQ DATA
OPEN SW
CLOSE SW
BU UP/DOWN SW
XRST
HOLD
IC701
MOTOR DRIVE
M721
TURN MOTOR
IC711
TBL ADDRESS SENSOR
S701
OPEN/CLOSE
S711
BU UP/DOWN

MAIN SECTION


TUNER SECTION
A
L-CH
CD SECTION
B
LOUT
J101
L
R
MD/VIDEO (AUDIO)
R-CH
INPUT SELECT TONE/VOL CONT IC101
IN2A
IN2C
IN2D
VOL OUT2
REF
INVOL OUT2
IN2B
DATA
CLOCK
IC102
IC501
POWER AMP
Q504,505 MUTE CONT
MUTE Q103
Q861 MUTE CONT
MUTE Q862
Q821,822 PROTECT DETECTOR
Q824,825 RELAY DRIVE
RY801
TM801
SPEAKER
R CH
Q101,102 DBFB CONT
Q503 DBFB SWITCH
Q503,504 MUTE CONT
MUTE Q581
D841
Q551 OVER LOAD DETECTOR
Q506,506 OVER HEAT DETECTOR
E MODEL ONLY
D502
Q823 PROTECT CONT
Q828,829 PROTECT SWITCH
J631 PHONS
DX5 ONLY
Q891,892 FAN DRIVE
FAN
DECK-A
PB HEAD
PB EQ AMP IC303
RV302
PB EQ AMP IC304
RV303
DECK PROC. IC301
REC
DOLBY B
DOL
PAS
PB
70
120
DECK-B
REC/PB HEAD
REC/PB SWITCH IC302
SWITCH Q304,305
R CH
C332,L301 BIAS TRAP
RV304 REC BIAS
REC EQ
RV301 REC(L) LEVEL
T301
BIAS OSC Q302,303
TA+12V
Q301
NORM
CROM
BIAS SW
ERASE HEAD
Q141 DC BIAS
+6V
A+12V
A120/70
B NORM/CROM/METAL
PB A/B
NORM/HIGH
ALC ON/OFF
BIAS ON/OFF
RM ON/OFF
NR ON/OFF
REC /PB/PASS
LM ON/OFF
MS OUT
TC BLOCK
A120/70
B120/70
A HALF
B HALF
A PLAY
B PLAY
A SHUT
B SHUT
A TRG M+
B TRG M+
CAP M H/L
CAP M+
16
Q393,394 A TRIG DRIVE
Q391,392 B TRIG DRIVE
Q395 CAP MOTOR SPEED CONT
Q396,397 CAP MOTOR DRIVE
A TRIG
B TRIG
CAP M H/L
CAP M CONT
B SHUT
A SHUT
B PLAY
A PLAY
B HALF
A HALF
TC RELAY
PB A/B
EQ H/N
ALC
BIAS
REC MUTE
NR ON/OFF
R/PB PASS
TC MUTE
AMS IN
DATA
CLK
X401 32.768kHz
X402 16MHz
XC IN
XC OUT
X IN
X OUT
DBFB ON/OFF
LINE MUTE
STK MUTE
RELAY H
PROTECT
IIC DATA
IIC CLK
WAKE UP
AC CUT
MASTER CONTROL IC401(2/2)
CD POWER
STBY RELAY
RESET
Q501
IC501 RESET
D822
FL601 FLOURESCENT INDICATOR TUBE
F1
F2
DISPLAY CONTROL IC601
HEADPHONE
P1 P35
G1 G17
Q606-614 LED DRIVER
Q615 +5.6V REG
+7V
IC602 SPEANA BPF
BPF 0
BPF 5
ALL BAND
R-CH
EXCEPT US,CND,AEP MODEL
RV722 MIC VOL
J721 MIC 1
IC722
DX5 MODEL ONLY
J722 MIC 2
IC721 ECHO LEVEL
RV721
S617,618 S623-628,630-636 FUCTION KEY
S611-616 S619-621,626,629 FUCTION KEY
S637-646 FUCTION KEY
KEY0
KEY1
KEY2
S601 VOLUME
VOL A
VOL B
SIRCS IC603
SIRCS
I2C DATA
I2CCLOCK
WAKE UP
RESET
PLAY1-3
EXIST1-3
Q630-635 LED DRIVER
D630-632
GROOVE LED
FILE LED
BASS SHIFT LED
FUNCTION LED
REC/PAUSE LED
SURROUND LED
Q621-626 LED DRIVER
D611-615 D617,618
POWER LED
Q604 LED DRIVER
D601 POWER
TIMER LED
Q605 LED DRIVER
D602 TIMER SELECT
XIN
XOUT
X601 12.5MHz
Q941 -V REG
-B
D541
F974
T971
POWER AMP
+B
-B
F975
CD D+5V
CD A+5V
IC911 +5V REG
Q911,912 CD POWER SWITCH
BX5 US,CND MODEL
F973
E,EA3,KR,TH MODEL
JW972
F971
DX5 E,EA3,MX MODEL
EXCEPT E MODEL
JW901
S951
E MODEL ONLY
AC IN
RDS D+5V UNSW
AUDIO +5V
A+12V
TC A+12V
MIC A+12V
ST A+12V
D952
D953
IC951 +5V REG
D901-904
D511
IC921 +12V REG
IC961 +9V REG
TC M+9V
D906-909
IC931 +7V REG
CD M+7V
LED +7V
F1
F2
BX MODEL ONLY
IC971 +5.6V REG
EVER +5.6V
D972-975
T972
Q971 RELAY DRIVE
RY971
AC IN

• RCH is omitted
• Signal Path

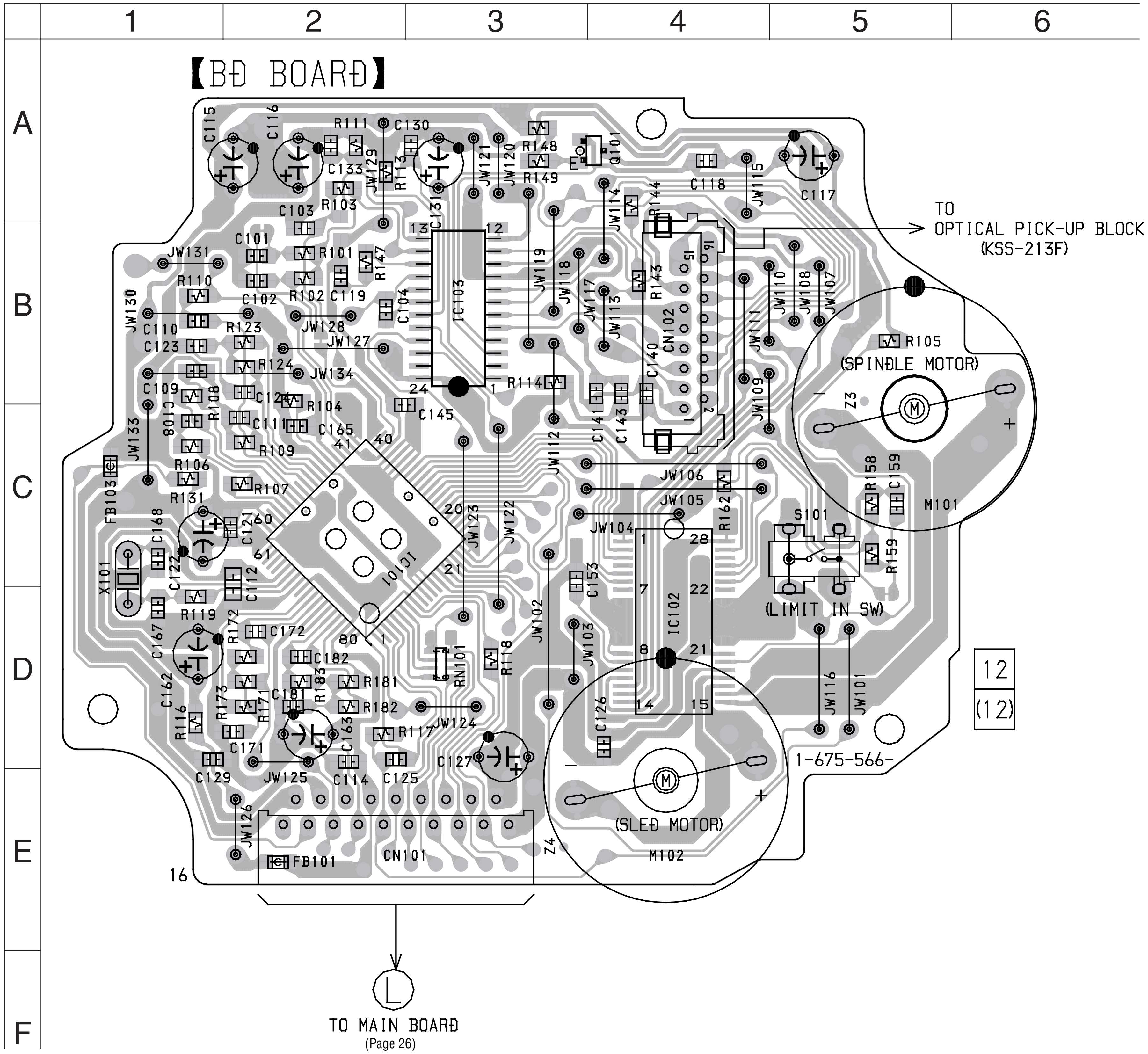
: PB (DECK A)
: PB (DECK B)
: REC (DECK B)
: FM
: CD

7-3. PRINTED WIRING BOARD BD SECTION

• See page page 21 for Circuit Boards Location.

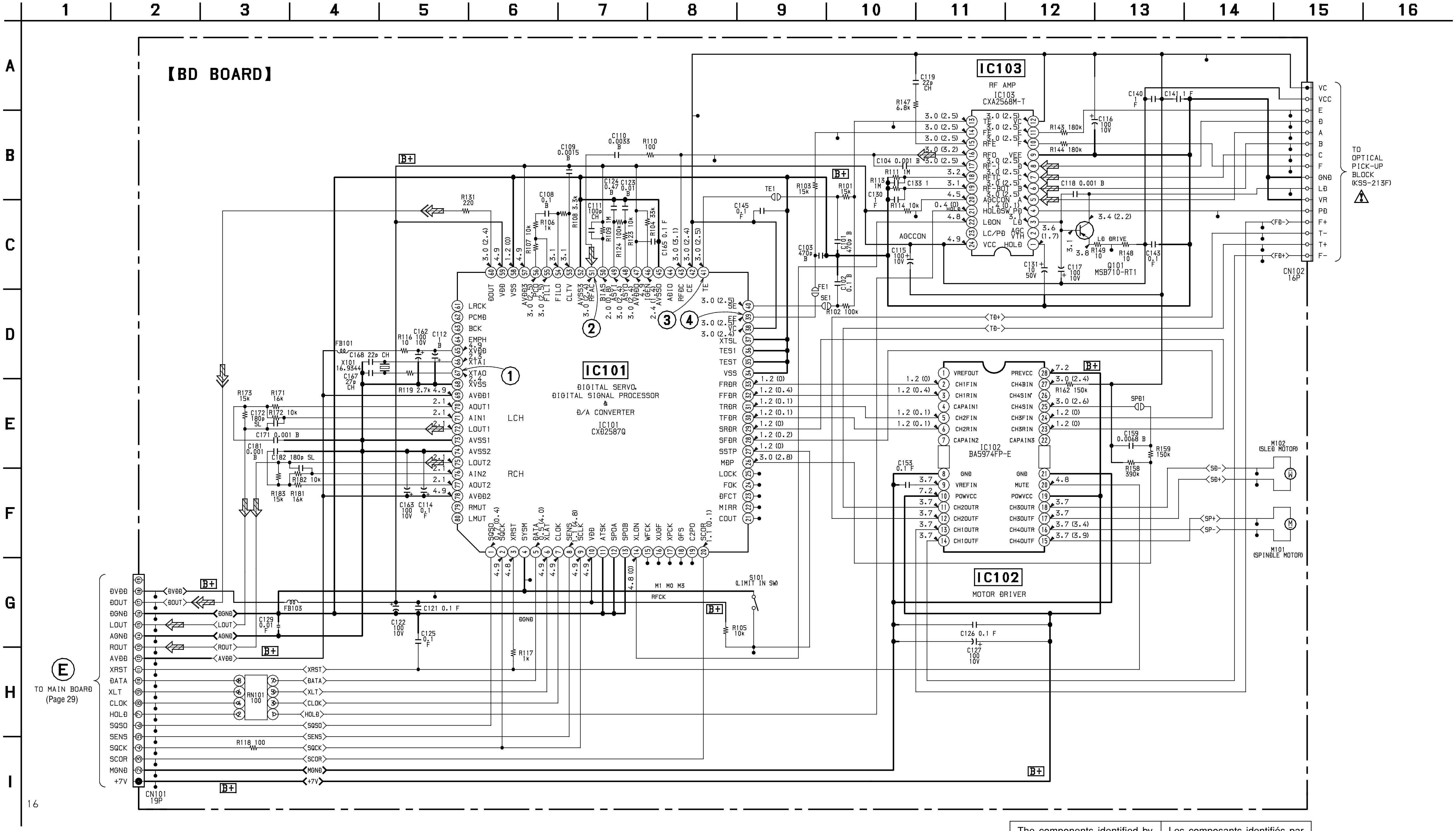
• Semiconductor Location

Ref. No.	Location
IC101	D-2
IC102	C-4
IC103	B-3
Q101	A-4


1
2
3
4
5
6
A
B
C
D
E
F
【BD BOARD】
TO OPTICAL PICK-UP BLOCK (KSS-213F)
IC101
IC102
IC103
Q101
CN101
CN102
X101
FB101
FB103
RN101
S101
(LIMIT IN SW)
(SPINDLE MOTOR)
M101
(SLED MOTOR)
M102
Z3
Z4
C101
C102
C103
C104
C109
C110
C111
C112
C114
C115
C116
C117
C118
C119
C121
C122
C123
C124
C125
C126
C127
C129
C130
C131
C133
C140
C141
C143
C145
C153
C159
C162
C163
C165
C167
C168
C171
C172
C181
C182
R101
R102
R103
R104
R105
R106
R107
R108
R109
R110
R111
R113
R114
R116
R117
R118
R119
R123
R124
R131
R143
R144
R147
R148
R149
R158
R159
R162
R171
R172
R173
R181
R182
R183
JW101
JW102
JW103
JW104
JW105
JW106
JW107
JW108
JW109
JW110
JW111
JW112
JW113
JW114
JW115
JW116
JW117
JW118
JW119
JW120
JW121
JW122
JW123
JW124
JW125
JW126
JW127
JW128
JW129
JW130
JW131
JW133
JW134
1-675-566-
12
(12)
16
TO MAIN BOARD
(Page 26)

7-4. SCHEMATIC DIAGRAM BD SECTION

- See page page 21 for Wavefoms.
- See page page 42 for IC Block Diagrams.


【BD BOARD】
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
IC101
DIGITAL SERVO,
DIGITAL SIGNAL PROCESSOR
&
D/A CONVERTER
IC101
CXD2587Q
LCH
RCH
IC102
MOTOR DRIVER
IC102
BA5974FP-E
IC103
RF AMP
IC103
CXA2568M-T
Q101
MSB710-RT1
LD DRIVE
X101
16.9344
CN101
19P
CN102
16P
TO OPTICAL PICK-UP BLOCK
(KSS-213F)
TO MAIN BOARD
(Page 29)
E
M102
(SLED MOTOR)
M101
(SPINDLE MOTOR)
S101
(LIMIT IN SW)
SPD1
RN101
100
FB101
FB103
TE1
FE1
SE1
B+
DVDD
DOUT
DGND
LOUT
AGND
ROUT
AVDD
XRST
DATA
XLT
CLOK
HOLD
SQSO
SENS
SQCK
SCOR
MGND
+7V
VC
VCC
E
D
A
B
C
F
GND
LD
VR
PD
F+
T-
T+
F-
SD-
SD+
SP+
SP-
TD+
TD-
FD-
FD+
M1 MD M3
RFCK
16

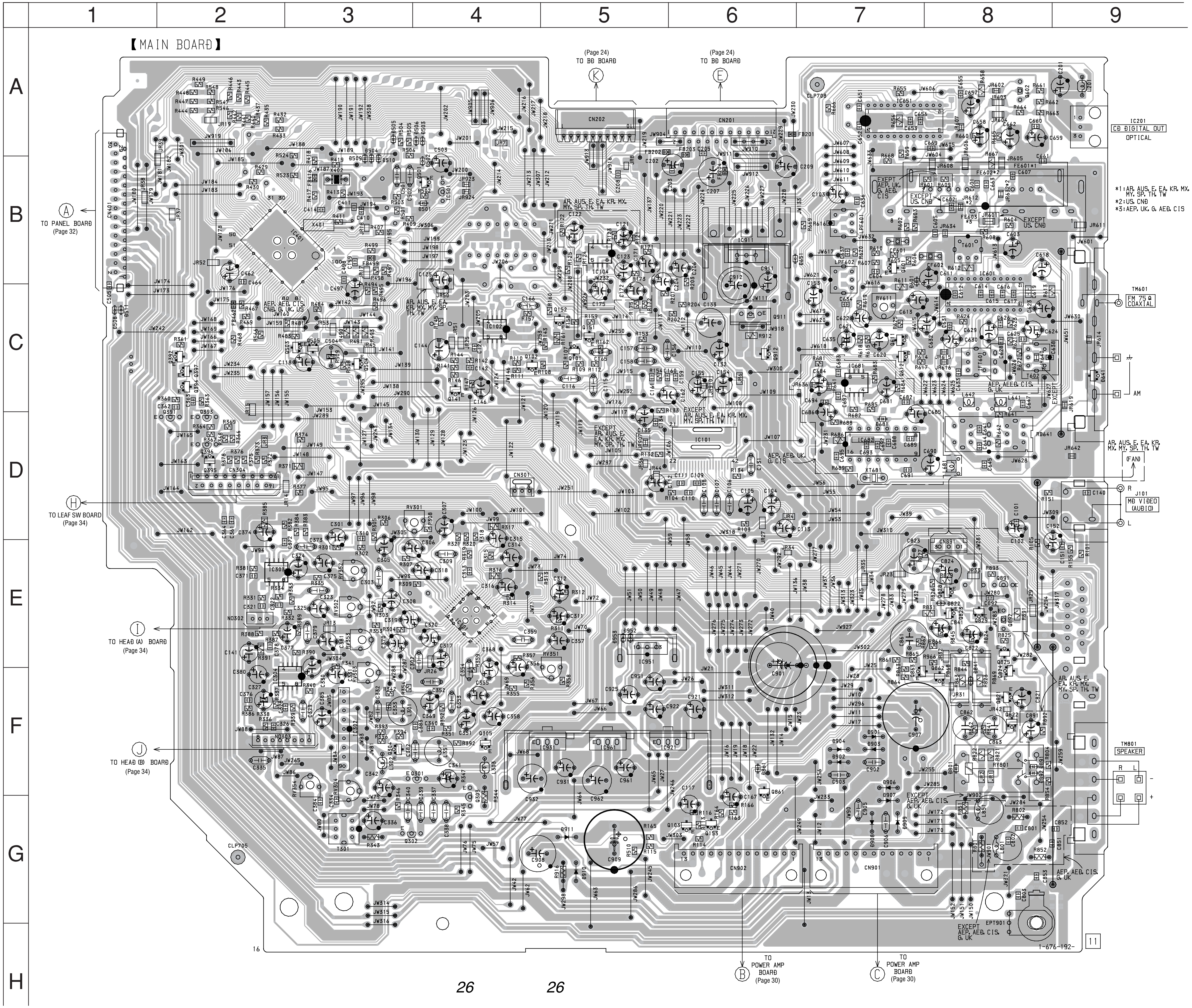
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

7-5. PRINTED WIRING BOARD MAIN SECTION

• See page page 21 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location
D501	B-3
D502	B-4
D503	A-4
D504	B-3
D505	A-3
D506	A-4
D508	C-1
D509	B-3
D510	B-3
D511	C-1
D601	B-7
D641	C-9
D651	B-7
D681	C-7
D801	F-8
D822	E-8
D861	F-6
D891	F-8
D892	F-8
D901	F-7
D902	F-7
D903	F-7
D904	F-7
D906	G-7
D907	G-7
D908	G-7
D909	G-7
D910	G-5
D911	G-5
D952	E-5
D953	E-5
D957	
IC104	B-5
IC101	D-6
IC102	C-4
IC302	F-3
IC303	E-2
IC304	F-3
IC301	E-4
IC401	B-3
IC501	B-4
IC601	C-8
IC651	A-7
IC681	C-7
IC682	D-7
IC911	B-6
IC951	E-5
IC961	F-6
Q101	C-5
Q102	C-4
Q103	G-6
Q141	C-4
Q151	C-5
Q152	C-5
Q153	G-6
Q301	G-4
Q302	G-3
Q303	G-4
Q304	F-3
Q305	F-4
Q391	D-2
Q392	D-2
Q393	D-2
Q394	C-2
Q395	D-2
Q396	D-2
Q397	C-2
Q501	B-4
Q503	C-3
Q504	C-3
Q505	C-3
Q601	B-7
Q602	A-8
Q611	C-7
Q612	C-7
Q821	F-8
Q822	F-8
Q823	E-8
Q824	E-8
Q825	E-8
Q828	E-8
Q829	E-8
Q861	F-6
Q862	F-8
Q863	E-7
Q891	E-8
Q892	E-8
Q911	C-6
Q912	C-6


1
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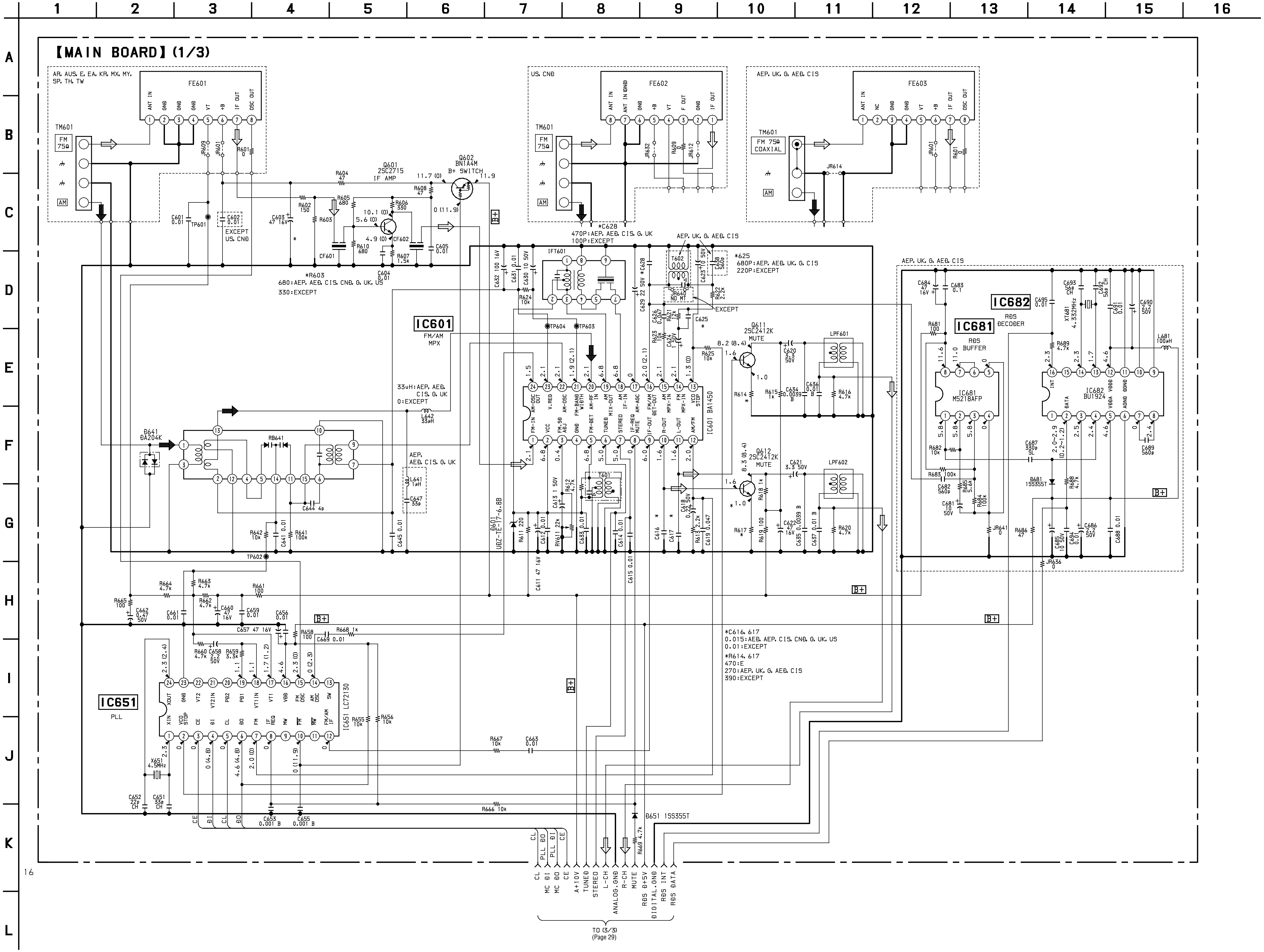
8
9
A
B
C
D
E
F
G
H
【MAIN BOARD】
(Page 24)
TO BD BOARD
K
(Page 24)
TO BD BOARD
E
CN202
CN201
A
TO PANEL BOARD
(Page 32)
H
TO LEAF SW BOARD
(Page 34)
I
TO HEAD (A) BOARD
(Page 34)
J
TO HEAD (B) BOARD
(Page 34)
IC201
CD DIGITAL OUT
OPTICAL
*1:AR, AUS, E, EA, KR, MX, MY, SP, TH, TW
*2:US, CND
*3:AEP, UK, G, AEB, CIS
TM601
FM 75Ω
COAXIAL
AM
AR, AUS, E, EA, KR, MX, MY, SP, TH, TW
(FAN)
R
J101
MD VIDEO
(AUDIO)
L
TM801
SPEAKER
R
L
IC401
IC101
IC911
IC601
IC951
IC961
C901
C907
C909
CN902
CN901
CLP705
CLP708
1-676-192-
11
B
TO POWER AMP BOARD
(Page 30)
C
TO POWER AMP BOARD
(Page 30)

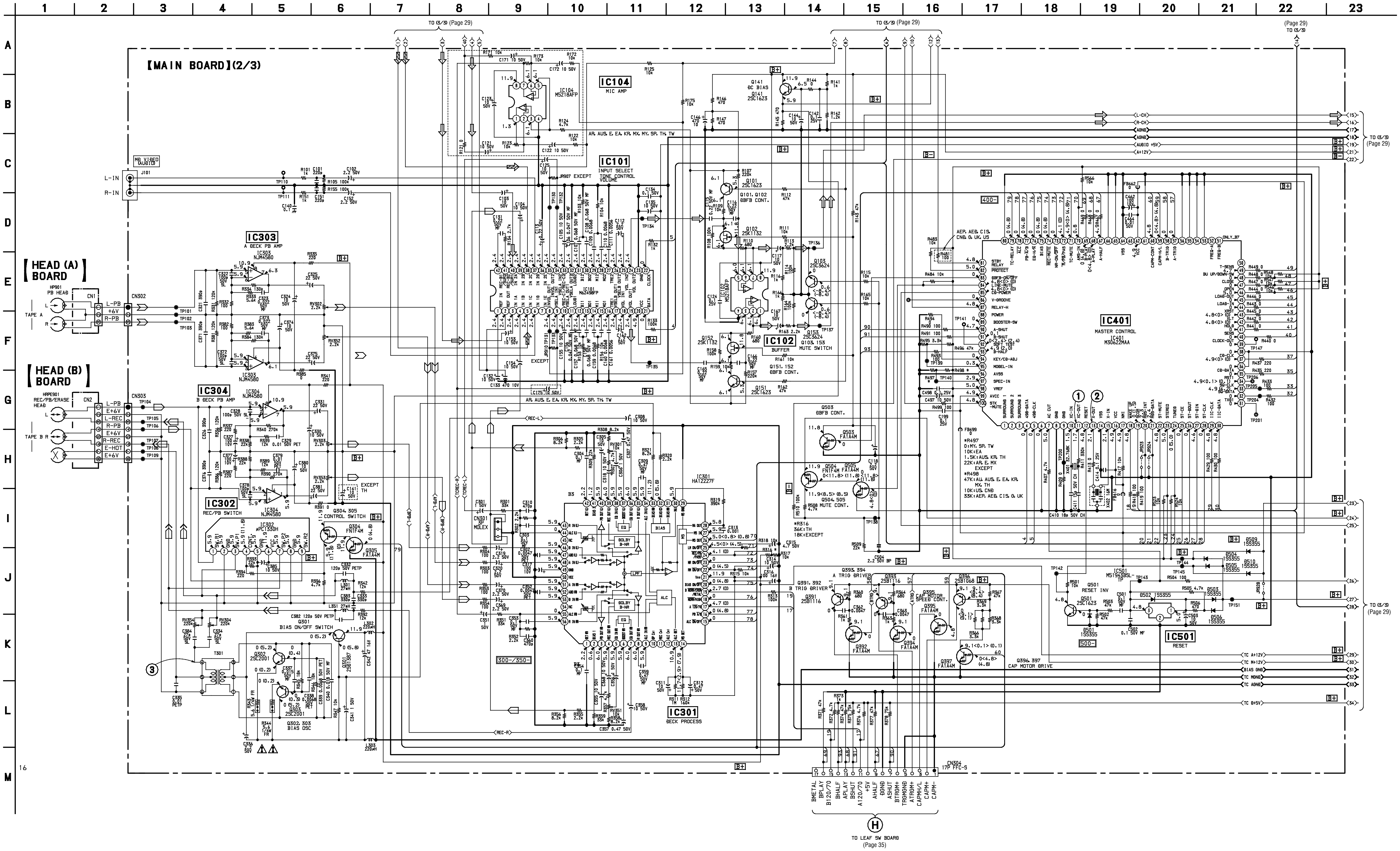
7-6. SCHEMATIC DIAGRAM MAIN SECTION (1/3)

• See page page 44 for IC Block Diagrams.


【MAIN BOARD】(1/3)
AR, AUS, E, EA, KR, MX, MY, SP, TH, TW
FE601
TM601
FM 75Ω
AM
US, CND
FE602
AEP, UK, G, AED, CIS
FE603
FM 75Ω COAXIAL
Q601 2SC2715 IF AMP
Q602 BN1A4M B+ SWITCH
*R603 680:AEP, AED, CIS, CND, G, UK, US 330:EXCEPT
*C628 470P:AEP, AED, CIS, G, UK 100P:EXCEPT
*625 680P:AEP, AED, UK, G, CIS 220P:EXCEPT
IFT601
T602
IC601 FM/AM MPX
IC601 BA1450
Q611 2SC2412K MUTE
Q612 2SC2412K MUTE
LPF601
LPF602
D641 DA204K
RB641
33uH:AEP, AED, CIS, G, UK 0:EXCEPT
AEP, AED, CIS, G, UK
D601 UDZ-TE-17-6.8B
T601
TP602
TP603
TP604
IC682 RDS DECODER
IC681 RDS BUFFER
IC681 M5218AFP
IC682 BU1924
XT681 4.332MHz
D681 1SS355T
IC651 PLL
IC651 LC72130
X651 4.5MHz
D651 1SS355T
*C616, 617
0.015:AED, AEP, CIS, CND, G, UK, US
0.01:EXCEPT
*R614, 617
470:E
270:AEP, UK, G, AED, CIS
390:EXCEPT
CL
MC DI
MC DO
CE
A+10V
TUNED
STEREO
L-CH
ANALOG.GND
R-CH
MUTE
RDS D+5V
DIGITAL.GND
RDS INT
RDS DATA
TO (3/3) (Page 29)
16

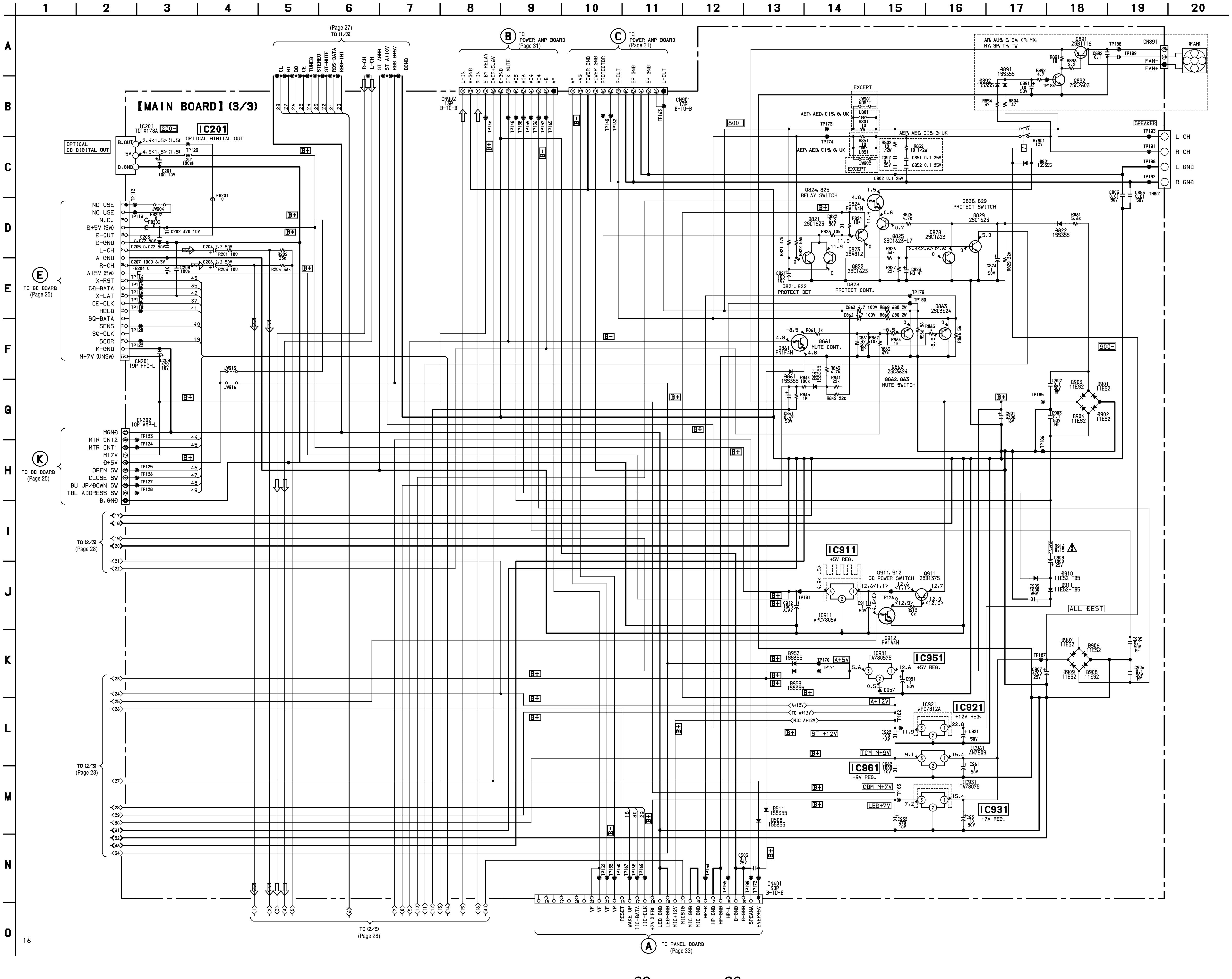
7-7. SCHEMATIC DIAGRAM MAIN SECTION (2/3)

- See page page 21 for Wavefoms.
- See page page 40 for IC Pin Function Description.
- See page page 44 for IC Block Diagrams.


【MAIN BOARD】(2/3)
HEAD (A) BOARD
HEAD (B) BOARD
TAPE A
TAPE B
HP901 PB HEAD
HRPE901 REC/PB/ERASE HEAD
L-IN
R-IN
J101
IC303 A DECK PB AMP NJM4580
IC304 B DECK PB AMP NJM4580
IC302 REC/PB SWITCH µPC1330H
IC104 MIC AMP M5218AFP
IC101 INPUT SELECT TONE CONTROL VOLUME
IC102 BUFFER M5218AFP
IC301 DECK PROCESS HA12227F
IC401 MASTER CONTROL M30622MAA
IC501 RESET M51943BSL-TP
Q301 BIAS ON/OFF SWITCH
Q302, 303 BIAS OSC
Q304, 305 CONTROL SWITCH
Q101, Q102 BBFB CONT.
Q141 BC BIAS
Q103, Q153 MUTE SWITCH
Q151, 152 BBFB CONT.
Q503 BBFB CONT.
Q504, 505 MUTE CONT.
Q391, 392 B TRIG DRIVER
Q393, 394 A TRIG DRIVER
Q395 CAP MOTOR SPEED CONT.
Q396, 397 CAP MOTOR DRIVE
Q501 RESET INV
CN304 17P FFC-S
TO LEAF SW BOARD (Page 35)
TO ③/③ (Page 29)
BHETAL BPLAY B120/70 BHALF APLAY BSHUT A120/70 +5V AHALF BGND ASHUT BTRG+ TRGMGND ATRG+ CAPM+/L CAPM+ CAPM-

7-8. SCHEMATIC DIAGRAM MAIN SECTION (3/3)

• See page page 44 for IC Block Diagrams.

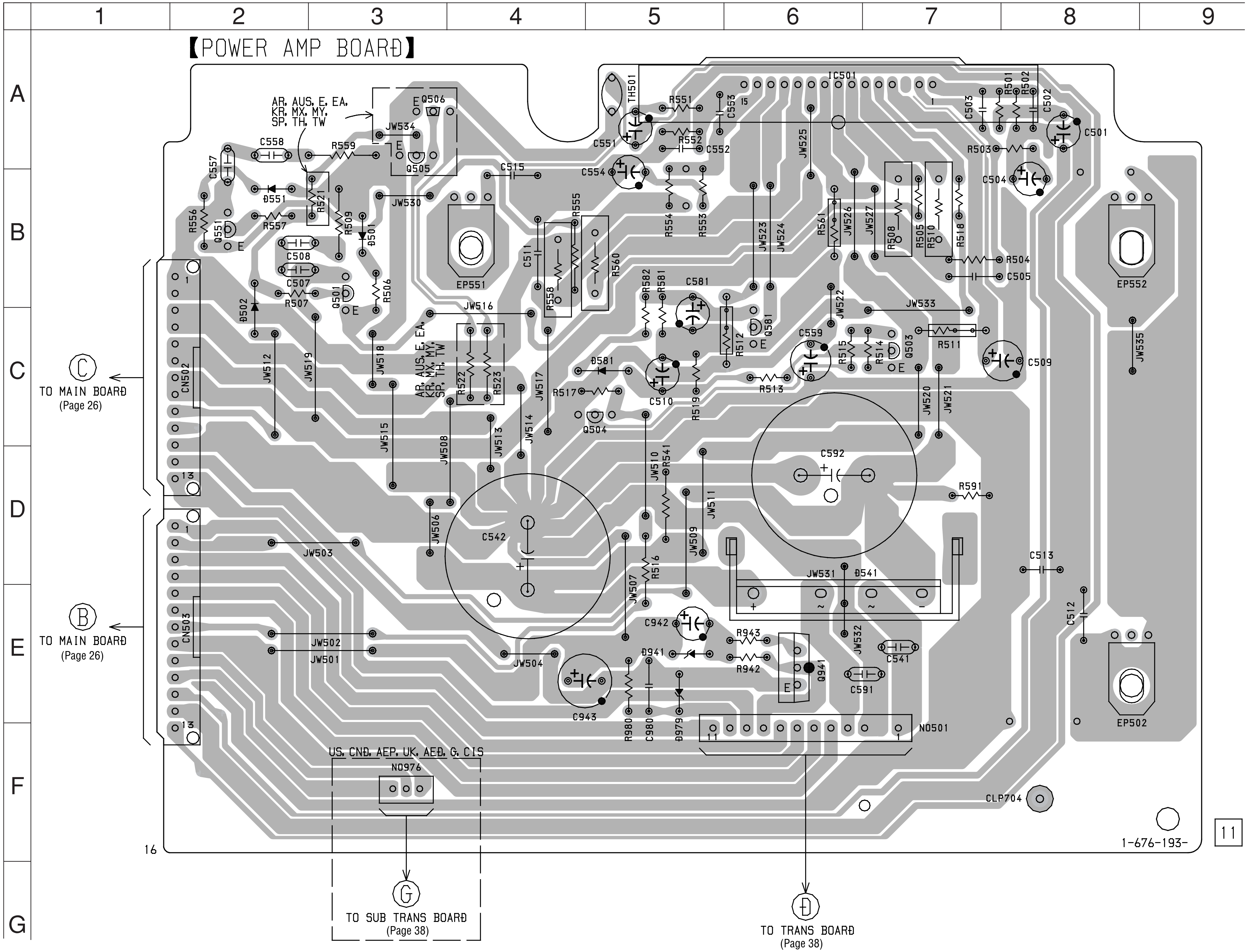

MAIN BOARD (3/3)
IC201
OPTICAL DIGITAL OUT
OPTICAL CD DIGITAL OUT
TO (1/3) (Page 27)
B TO POWER AMP BOARD (Page 31)
C TO POWER AMP BOARD (Page 31)
CN902 13P B-TO-B
CN901 13P B-TO-B
E TO BD BOARD (Page 25)
K TO BD BOARD (Page 25)
CN201 19P FFC-L
CN202 10P AMP-L
TO (2/3) (Page 28)
Q824, 825 RELAY SWITCH
Q828, 829 PROTECT SWITCH
Q821, 822 PROTECT DET
Q823 PROTECT CONT.
Q861 MUTE CONT.
Q862, 863 MUTE SWITCH
Q911, 912 CD POWER SWITCH
IC911 +5V REG.
IC951 +5V REG.
IC921 +12V REG.
IC961 +9V REG.
IC931 +7V REG.
SPEAKER
L CH
R CH
L GND
R GND
FAN
CN891
CN401 30P B-TO-B
A TO PANEL BOARD (Page 33)
TO (2/3) (Page 28)
ALL DEST

7-9. PRINTED WIRING BOARD POWER AMP SECTION

• See page page 21 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location
D501	B-3
D502	C-2
D541	D-6
D551	B-2
D581	C-5
D941	E-5
D979	E-5
IC501	A-6
Q501	B-3
Q503	B-7
Q504	C-5
Q505	A-3
Q506	A-3
Q551	B-2
Q581	C-6
Q941	E-6


1
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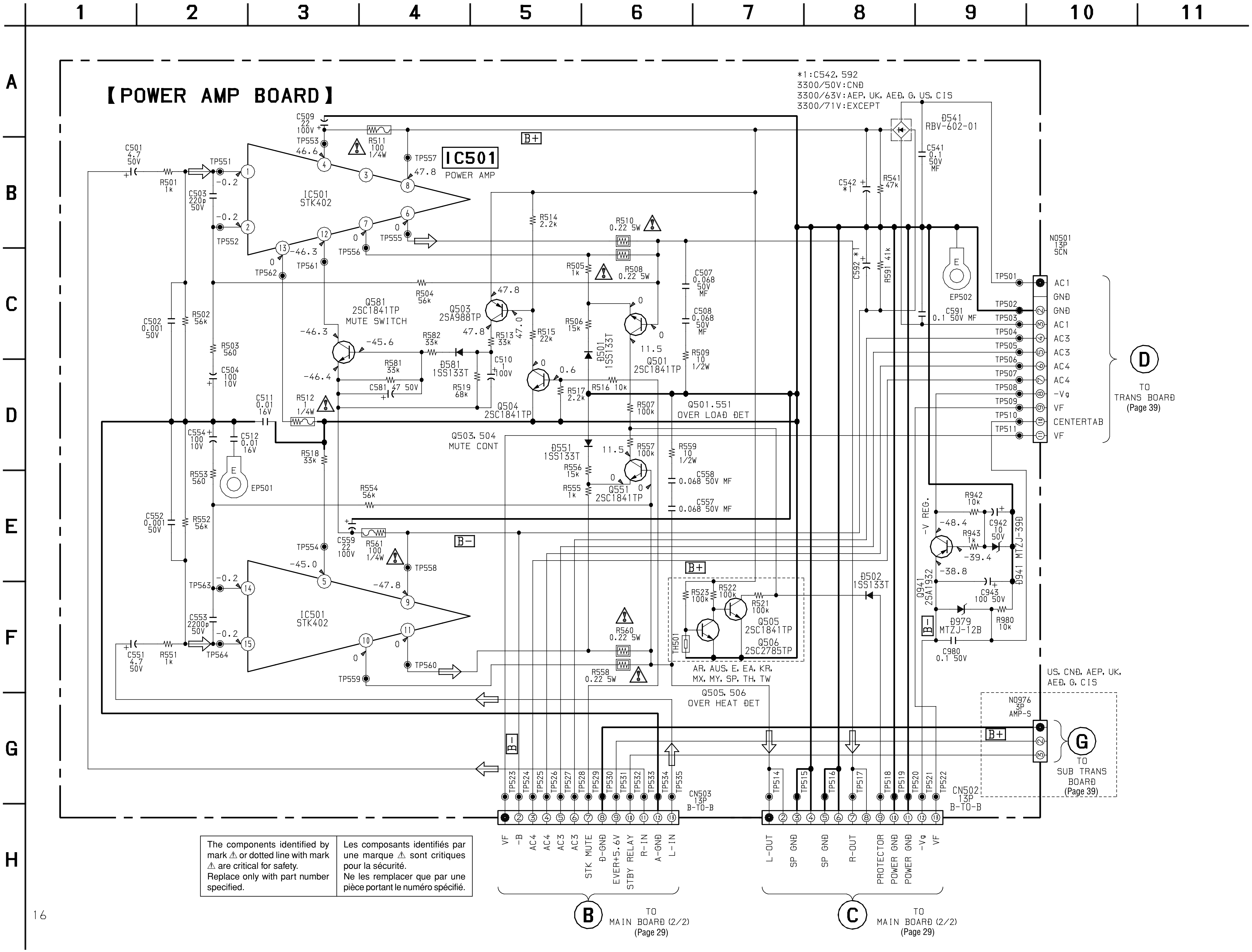
6
7
8
9
A
B
C
D
E
F
G
【POWER AMP BOARD】
AR, AUS, E, EA, KR, MX, MY, SP, TH, TW
Q506
JW534
Q505
C558
R559
C557
D551
R521
R509
D501
JW530
C515
R556
Q551
R557
C508
C507
R507
D502
Q501
R506
EP551
TH501
R551
C553
R552
C552
C551
C554
IC501
JW525
R555
R554
R553
C511
R560
R558
JW516
JW523
JW524
R561
JW526
JW527
R508
R505
R510
R518
C503
R501
R502
C502
C501
R503
C504
R504
C505
EP552
R582
R581
C581
Q581
R512
JW522
JW533
C559
R515
R514
Q503
R511
C509
JW535
CN502
JW512
JW519
JW518
R522
R523
JW517
D581
R517
C510
R519
R513
JW520
JW521
Q504
C592
JW515
JW508
JW513
JW514
JW510
R541
JW511
R591
C542
JW506
JW503
JW509
R516
JW507
JW531
D541
C513
C512
CN503
JW502
JW501
JW504
C942
R943
R942
D941
Q941
JW532
C541
C591
C943
R980
C980
D979
N0501
EP502
US, CND, AEP, UK, AED, G, CIS
N0976
CLP704
1-676-193-
11
16
C
TO MAIN BOARD
(Page 26)
B
TO MAIN BOARD
(Page 26)
G
TO SUB TRANS BOARD
(Page 38)
D
TO TRANS BOARD
(Page 38)

7-10. SCHEMATIC DIAGRAM POWER AMP SECTION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10
11
A
B
C
D
E
F
G
H
【POWER AMP BOARD】
IC501
POWER AMP
IC501 STK402
*1:C542, 592
3300/50V:CND
3300/63V:AEP, UK, AED, G, US, CIS
3300/71V:EXCEPT
D541 RBV-602-01
C541 0.1 50V MF
C542 *1
R541 47k
C592 *1
R591 41k
C509 22 100V
TP553
46.6
R511 100 1/4W
TP557
47.8
B+
C501 4.7 50V
R501 1k
TP551
-0.2
C503 220p 50V
TP552
TP555
TP556
TP561
TP562
-46.3
R514 2.2k
R510 0.22 5W
R505 1k
R508 0.22 5W
C507 0.068 50V MF
C508 0.068 50V MF
R509 10 1/2W
R504 56k
Q581 2SC1841TP MUTE SWITCH
Q503 2SA988TP
R513 33k
R515 22k
47.0
R506 15k
D501 1SS133T
Q501 2SC1841TP
11.5
R582 33k
D581 1SS133T
R581 33k
C510 1 100V
C581 47 50V
R519 68k
Q504 2SC1841TP
R517 2.2k
R516 10k
R507 100k
Q501, 551 OVER LOAD DET
-45.6
-46.4
R502 56k
C502 0.001 50V
R503 560
C504 100 10V
C511 0.01 16V
R512 1 1/4W
C554 100 10V
C512 0.01 16V
R553 560
EP501
R518 33k
Q503, 504 MUTE CONT
D551 1SS133T
R556 15k
R555 1k
R557 100k
Q551 2SC1841TP
R559 10 1/2W
C558 0.068 50V MF
C557 0.068 50V MF
R554 56k
C552 0.001 50V
R552 56k
C559 22 100V
R561 100 1/4W
B-
TP554
-45.0
TP558
-47.8
TP563
C553 2200p 50V
TP564
C551 4.7 50V
R551 1k
TP559
TP560
R560 0.22 5W
R558 0.22 5W
R523 100k
R522 100k
R521 100k
Q505 2SC1841TP
Q506 2SC2785TP
TH501
AR, AUS, E, EA, KR, MX, MY, SP, TH, TW
Q505, 506 OVER HEAT DET
D502 1SS133T
-V REG.
R942 10k
-48.4
C942 10 50V
R943 1k
-39.4
-38.8
D941 MTZJ-39D
Q941 2SA1932
C943 100 50V
D979 MTZJ-12B
R980 10k
C980 0.1 50V
EP502
C591 0.1 50V MF
N0501 13P SCN
TP501 AC1
GND
TP502 GND
TP503 AC1
TP504 AC3
TP505 AC3
TP506 AC4
TP507 AC4
TP508 -Vg
TP509 VF
TP510 CENTERTAB
TP511 VF
D
TO TRANS BOARD (Page 39)
US, CND, AEP, UK, AED, G, CIS
N0976 3P AMP-S
G
TO SUB TRANS BOARD (Page 39)
CN503 13P B-TO-B
TP523 VF
TP524 -B
TP525 AC4
TP526 AC4
TP527 AC3
TP528 AC3
TP529 STK MUTE
TP530 D-GND
TP531 EVER+5.6V
TP532 STBY RELAY
TP533 R-IN
TP534 A-GND
TP535 L-IN
B
TO MAIN BOARD (2/2) (Page 29)
CN502 13P B-TO-B
TP514 L-OUT
TP515 SP GND
TP516 SP GND
TP517 R-OUT
TP518 PROTECTOR
TP519 POWER GND
TP520 POWER GND
TP521 -Vg
TP522 VF
C
TO MAIN BOARD (2/2) (Page 29)
16

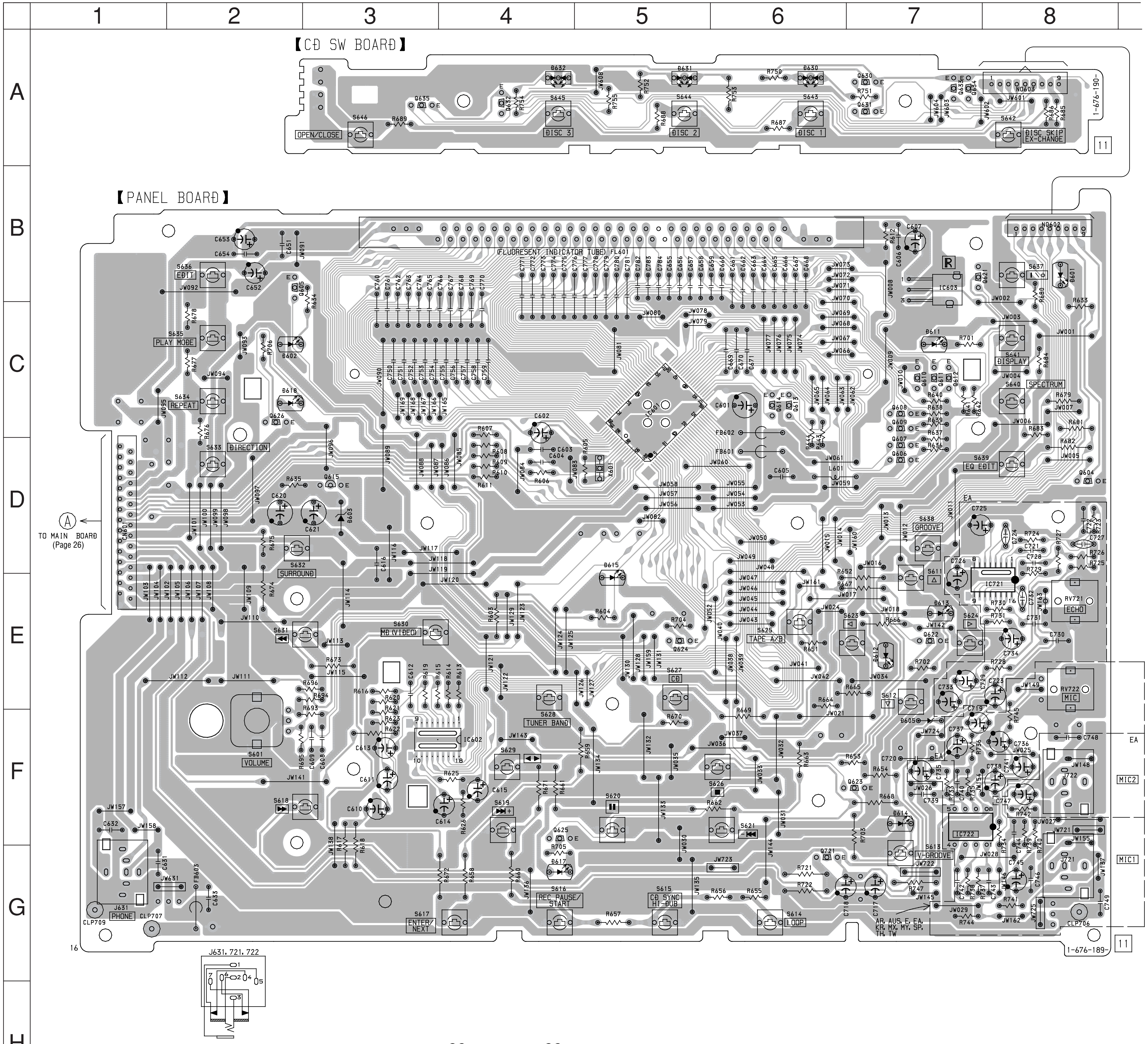
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

7-11. PRINTED WIRING BOARD PANEL SECTION

• See page page 21 for Circuit Boards Location.

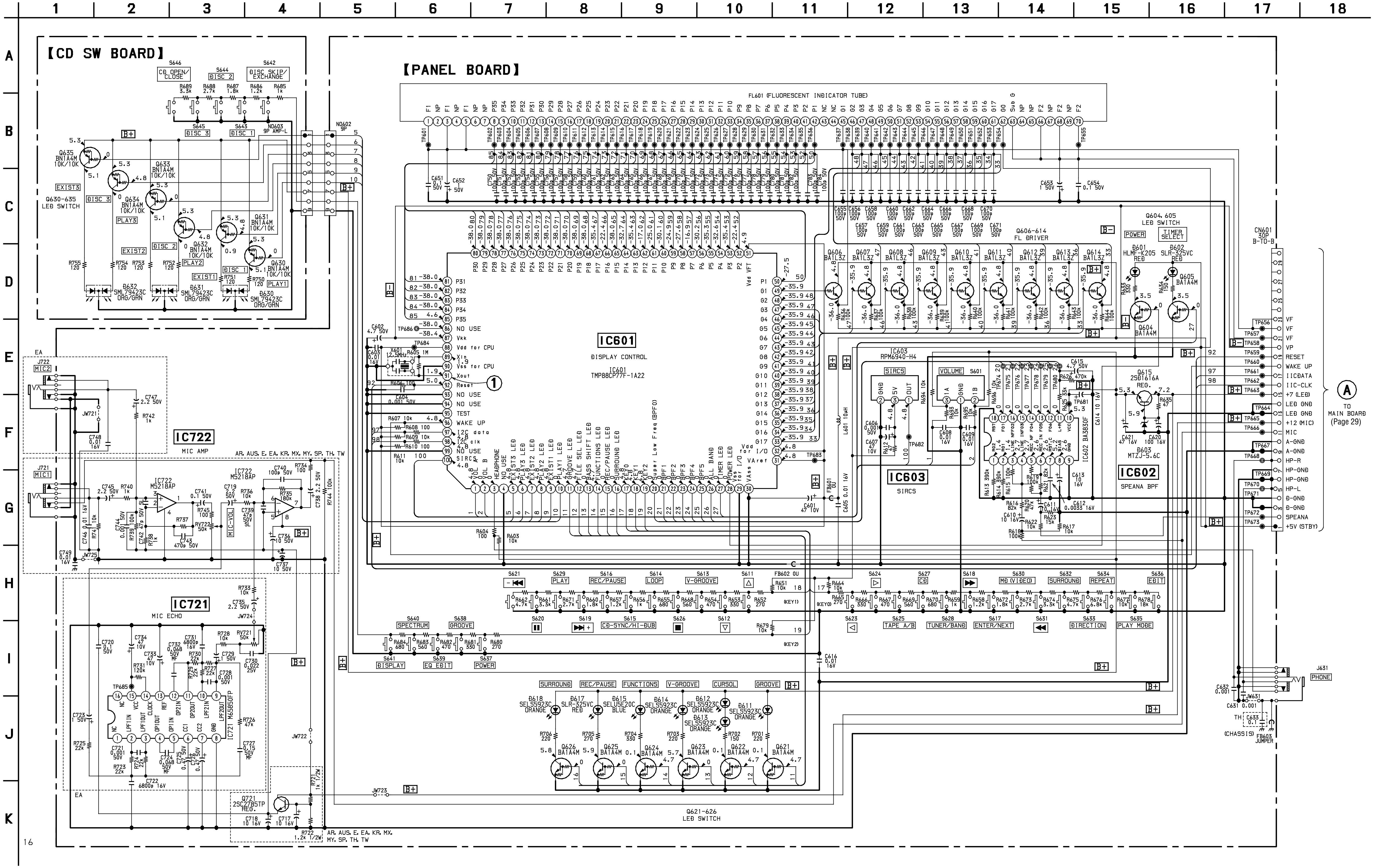
• Semiconductor Location

Ref. No.	Location
D601	B-8
D602	C-2
D603	D-3
D611	C-7
D612	E-7
D613	E-7
D614	F-7
D615	D-5
D617	G-4
D618	C-2
D630	A-6
D631	A-5
D632	A-4
IC601	C-5
IC602	F-4
IC603	B-7
IC721	E-8
IC722	F-8
Q604	D-8
Q605	B-2
Q606	D-7
Q607	D-7
Q608	C-7
Q609	C-7
Q610	C-7
Q611	C-7
Q612	C-7
Q613	C-6
Q614	C-6
Q615	D-3
Q621	B-7
Q622	E-7
Q623	F-7
Q624	E-5
Q625	F-4
Q626	C-2
Q630	A-7
Q631	A-7
Q632	A-4
Q633	A-7
Q634	A-7
Q635	A-3
Q721	G-6


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
【CD SW BOARD】
OPEN/CLOSE
DISC 3
DISC 2
DISC 1
DISC SKIP EX-CHANGE
1-676-190-
11
【PANEL BOARD】
(FLUORESENT INDICATOR TUBE) FL601
EDIT
PLAY MODE
REPEAT
DIRECTION
SURROUND
MD (VIDEO)
VOLUME
DISPLAY
SPECTRUM
EQ EDIT
GROOVE
ECHO
MIC
TAPE A/B
CD
TUNER BAND
REC PAUSE/START
CD SYNC HI-DUB
ENTER/NEXT
LOOP
V-GROOVE
PHONE
MIC2
MIC1
EA
AR, AUS, E, EA, KR, MX, MY, SP, TH, TW
TO MAIN BOARD (Page 26)
A
CLP709
CLP707
CLP706
1-676-189-
11
16
J631, 721, 722

7-12. SCHEMATIC DIAGRAM PANEL SECTION

- See page page 21 for Wavefoms.
- See page page 41 for IC Pin Function Description.
- See page page 43 for IC Block Diagrams.

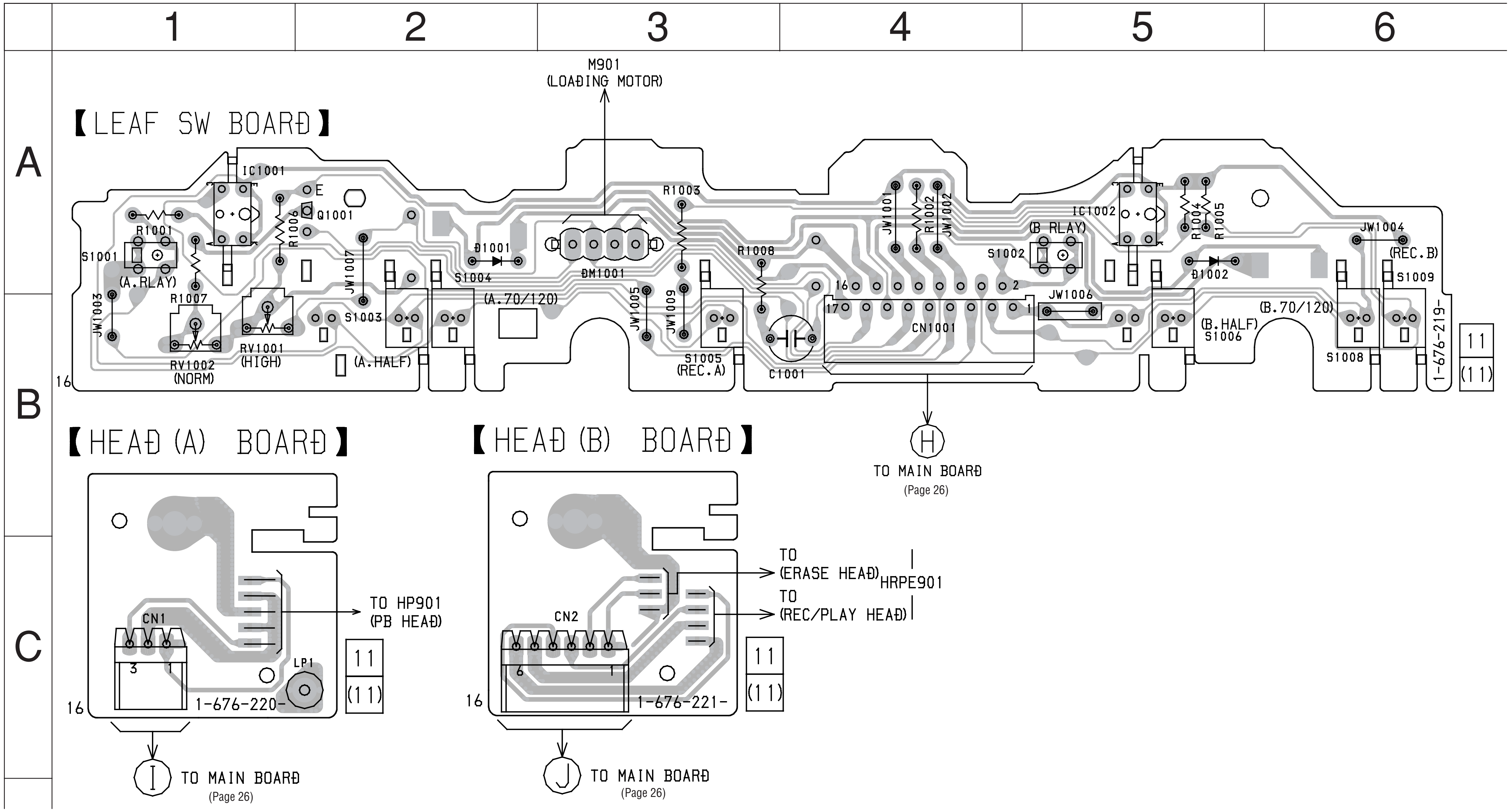

【CD SW BOARD】
【PANEL BOARD】
FL601 (FLUORESCENT INDICATOR TUBE)
IC601
DISPLAY CONTROL
IC601 TMP88CP77F-1A22
IC603
RPM6940-H4
SIRCS
IC602
IC602 BA3830F
SPEANA BPF
IC722
MIC AMP
IC722 M5218AP
IC721
MIC ECHO
IC721 M65850FP
Q630-635 LED SWITCH
Q606-614 FL DRIVER
Q604, 605 LED SWITCH
Q615 2SD1616A REG.
D603 MTZJ-5.6C
Q621-626 LED SWITCH
Q721 2SC2785TP REG.
CN601 30P B-TO-B
TO MAIN BOARD (Page 29)
J631 PHONE
J721 MIC1
J722 MIC2
EA
S646 CD OPEN/CLOSE
S644 DISC 2
S642 DISC SKIP/EXCHANGE
S645 DISC 3
S643 DISC 1
S621 -|◀◀
S629 PLAY
S616 REC/PAUSE
S614 LOOP
S613 V-GROOVE
S611 △
S624 ▷
S627 CD
S618 ▶▶
S630 MD (VIDEO)
S632 SURROUND
S634 REPEAT
S636 EDIT
S620 ||
S619 ▶▶|+
S615 CD-SYNC/HI-DUB
S626 ■
S612 ▽
S623 ◁
S625 TAPE A/B
S628 TUNER/BAND
S617 ENTER/NEXT
S631 ◀◀
S633 DIRECTION
S635 PLAY MODE
S640 SPECTRUM
S638 GROOVE
S641 DISPLAY
S639 EQ EDIT
S637 POWER
D618 SEL5923C ORANGE
D617 SLR-325VC RED
D615 SEL5U20C BLUE
D614 SEL5923C ORANGE
D612 SEL5923C ORANGE
D613 SEL5923C ORANGE
D611 SEL5923C ORANGE
D601 HLMF-K205 RED
D602 SLR-325VC RED
X601 12.5MHz
VF
VP
RESET
WAKE UP
I2CDATA
I2C-CLK
+7 (LED)
LED GND
+12 (MIC)
MIC
A-GND
HP-R
HP-GND
HP-L
D-GND
SPEANA
+5V (STBY)
AR, AUS, E, EA, KR, MX, MY, SP, TH, TW
16

7-13. PRINTED WIRING BOARD LEAF SW SECTION

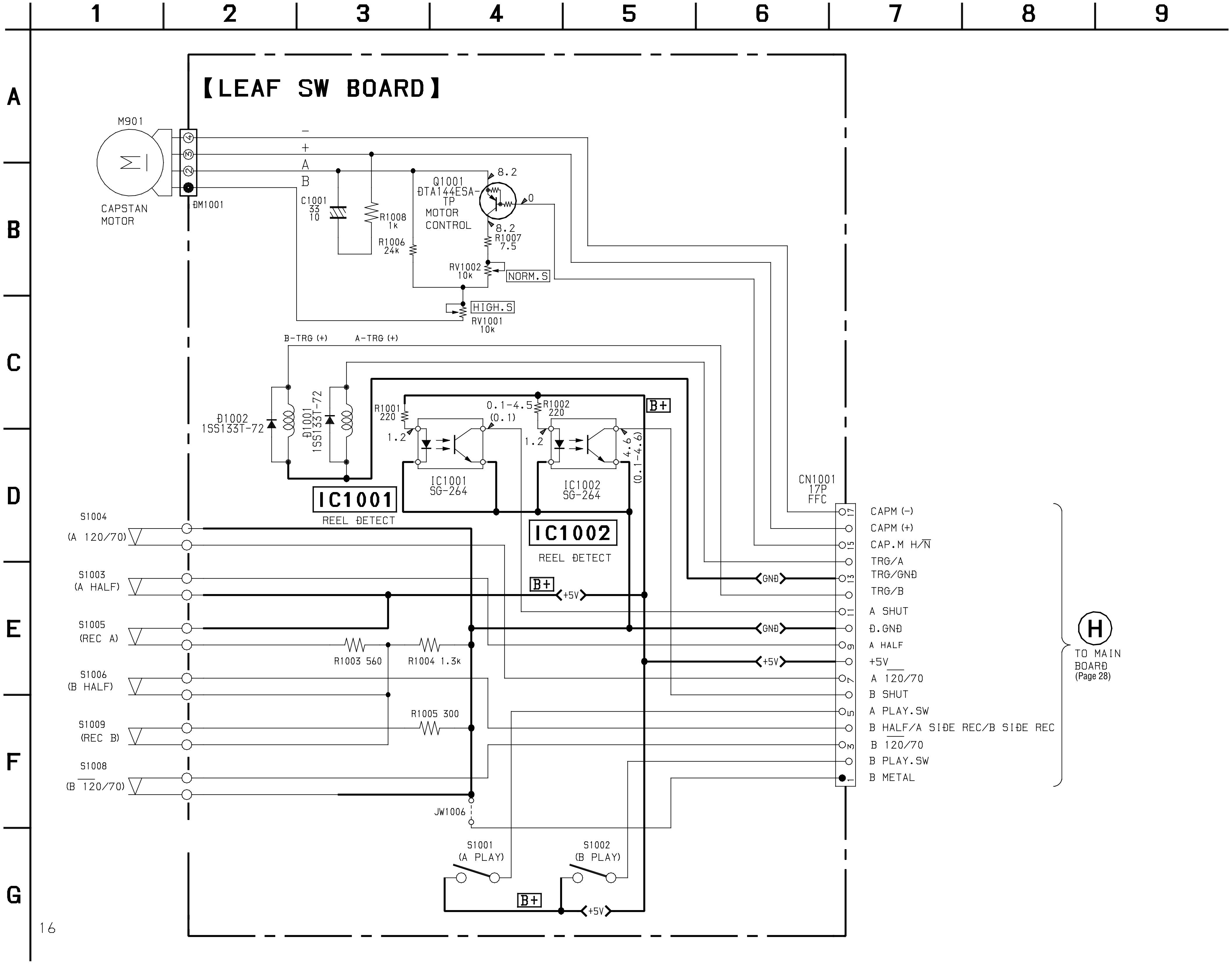
• See page page 21 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location
D1001	A-2
D1002	A-5
IC1001	A-1
IC1002	A-5
Q1001	A-2


1
2
3
4
5
6
A
B
C
M901
(LOADING MOTOR)
【LEAF SW BOARD】
IC1001
E
Q1001
R1006
R1001
S1001
(A.RLAY)
R1007
JW1003
RV1002
(NORM)
RV1001
(HIGH)
JW1007
S1003
(A.HALF)
S1004
D1001
(A.70/120)
DM1001
R1003
R1008
JW1005
JW1009
S1005
(REC.A)
C1001
16
17
2
1
CN1001
JW1001
R1002
JW1002
S1002
(B RLAY)
IC1002
R1004
R1005
D1002
JW1006
(B.HALF)
S1006
(B.70/120)
S1008
JW1004
(REC.B)
S1009
1-676-219-
11
(11)
16
H
TO MAIN BOARD
(Page 26)
【HEAD (A) BOARD】
CN1
3
1
LP1
1-676-220-
TO HP901
(PB HEAD)
11
(11)
16
I
TO MAIN BOARD
(Page 26)
【HEAD (B) BOARD】
CN2
6
1
1-676-221-
TO
(ERASE HEAD)
HRPE901
TO
(REC/PLAY HEAD)
11
(11)
16
J
TO MAIN BOARD
(Page 26)

7-14. SCHEMATIC DIAGRAM LEAF SW SECTION

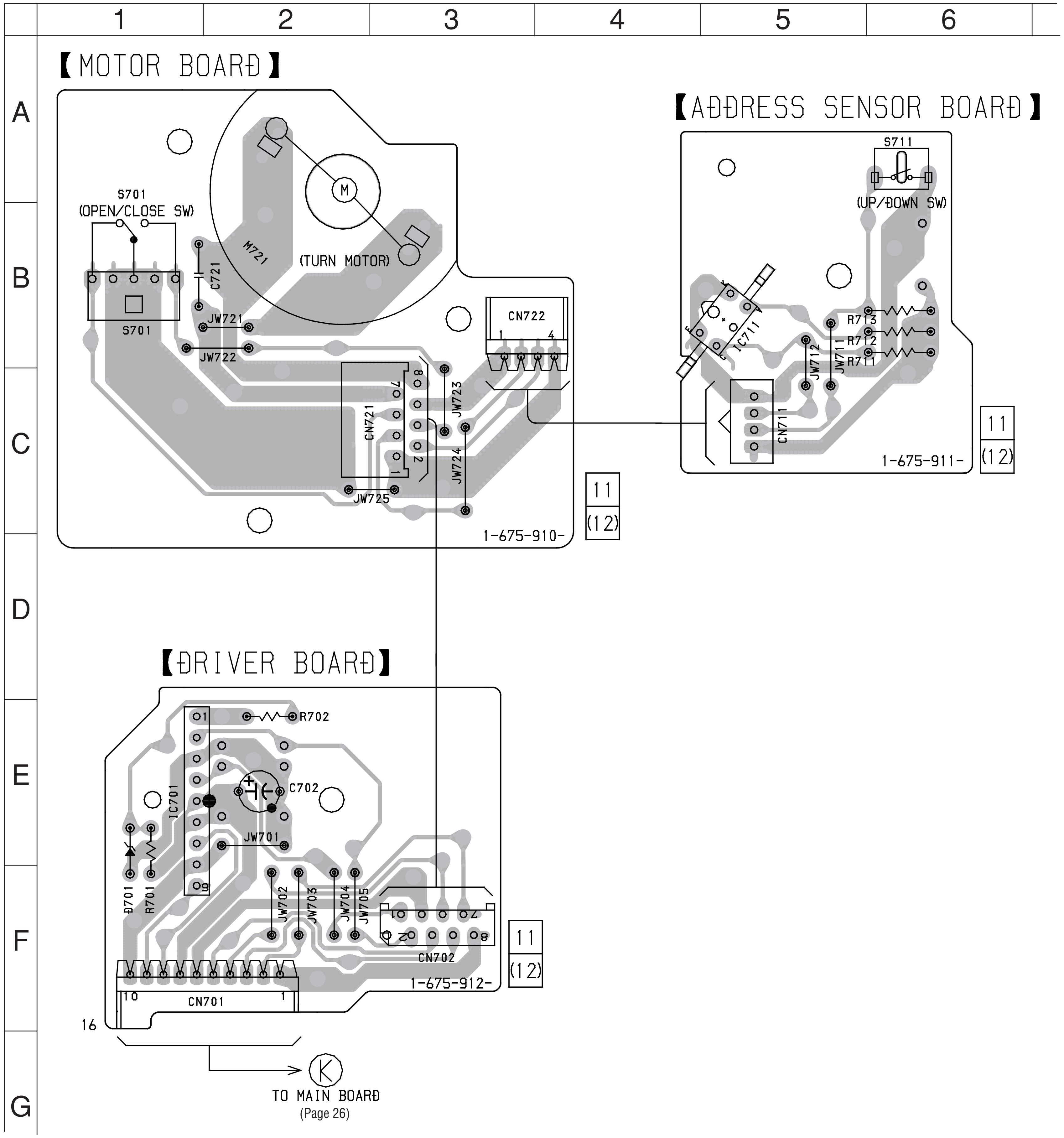

1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
【LEAF SW BOARD】
M901
CAPSTAN MOTOR
ĐM1001
−
+
A
B
C1001 33 10
R1008 1k
R1006 24k
Q1001 ĐTA144ESA-TP MOTOR CONTROL
8.2
0
8.2
R1007 7.5
RV1002 10k
NORM.S
HIGH.S
RV1001 10k
B-TRG (+)
A-TRG (+)
Đ1002 1SS133T-72
Đ1001 1SS133T-72
R1001 220
0.1-4.5
(0.1)
R1002 220
B+
1.2
1.2
4.6
(0.1-4.6)
IC1001 SG-264
IC1002 SG-264
IC1001 REEL ĐETECT
IC1002 REEL ĐETECT
S1004 (A 120/70)
S1003 (A HALF)
S1005 (REC A)
S1006 (B HALF)
S1009 (REC B)
S1008 (B 120/70)
R1003 560
R1004 1.3k
R1005 300
B+
+5V
GNĐ
GNĐ
+5V
JW1006
S1001 (A PLAY)
S1002 (B PLAY)
B+
+5V
CN1001 17P FFC
17 CAPM (−)
CAPM (+)
15 CAP.M H/N̄
TRG/A
13 TRG/GNĐ
TRG/B
11 A SHUT
Đ.GNĐ
9 A HALF
+5V
7 A 120/70
B SHUT
5 A PLAY.SW
B HALF/A SIĐE REC/B SIĐE REC
3 B 120/70
B PLAY.SW
1 B METAL
H
TO MAIN BOARĐ (Page 28)
16

7-15. PRINTED WIRING BOARD DRIVER SECTION

• See page page 21 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location
D701	E-1
IC701	E-1
IC711	B-5


1
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A
B
C
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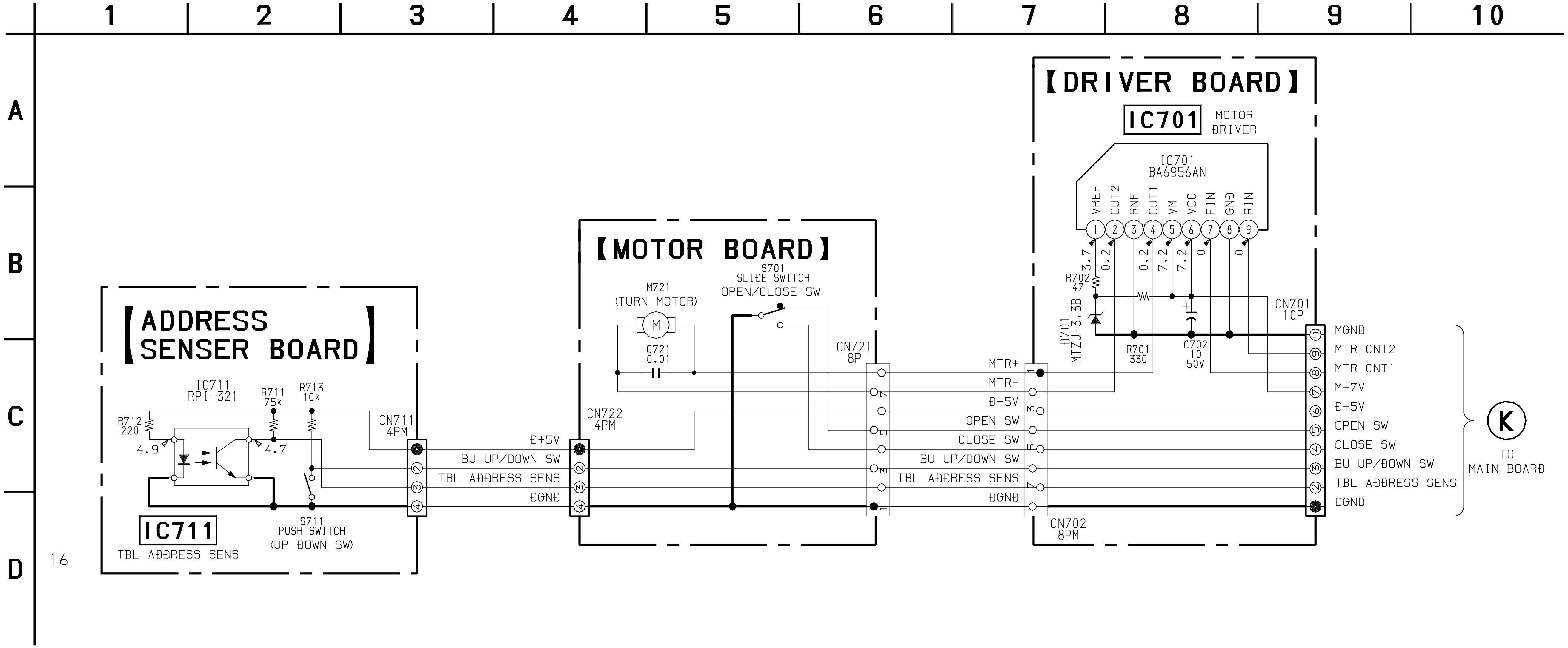
E
F
G
【MOTOR BOARD】
S701
(OPEN/CLOSE SW)
S701
C721
M721
M
(TURN MOTOR)
JW721
JW722
CN722
1
4
8
7
CN721
JW723
JW724
2
1
JW725
1-675-910-
11
(12)
【ADDRESS SENSOR BOARD】
S711
(UP/DOWN SW)
IC711
R713
R712
R711
JW712
JW711
CN711
1-675-911-
11
(12)
【DRIVER BOARD】
R702
IC701
C702
JW701
D701
R701
JW702
JW703
JW704
JW705
CN702
1-675-912-
11
(12)
10
CN701
1
16
K
TO MAIN BOARD
(Page 26)

7-16. SCHEMATIC DIAGRAM DRIVER SECTION

• See page page 43 for IC Block Diagrams.

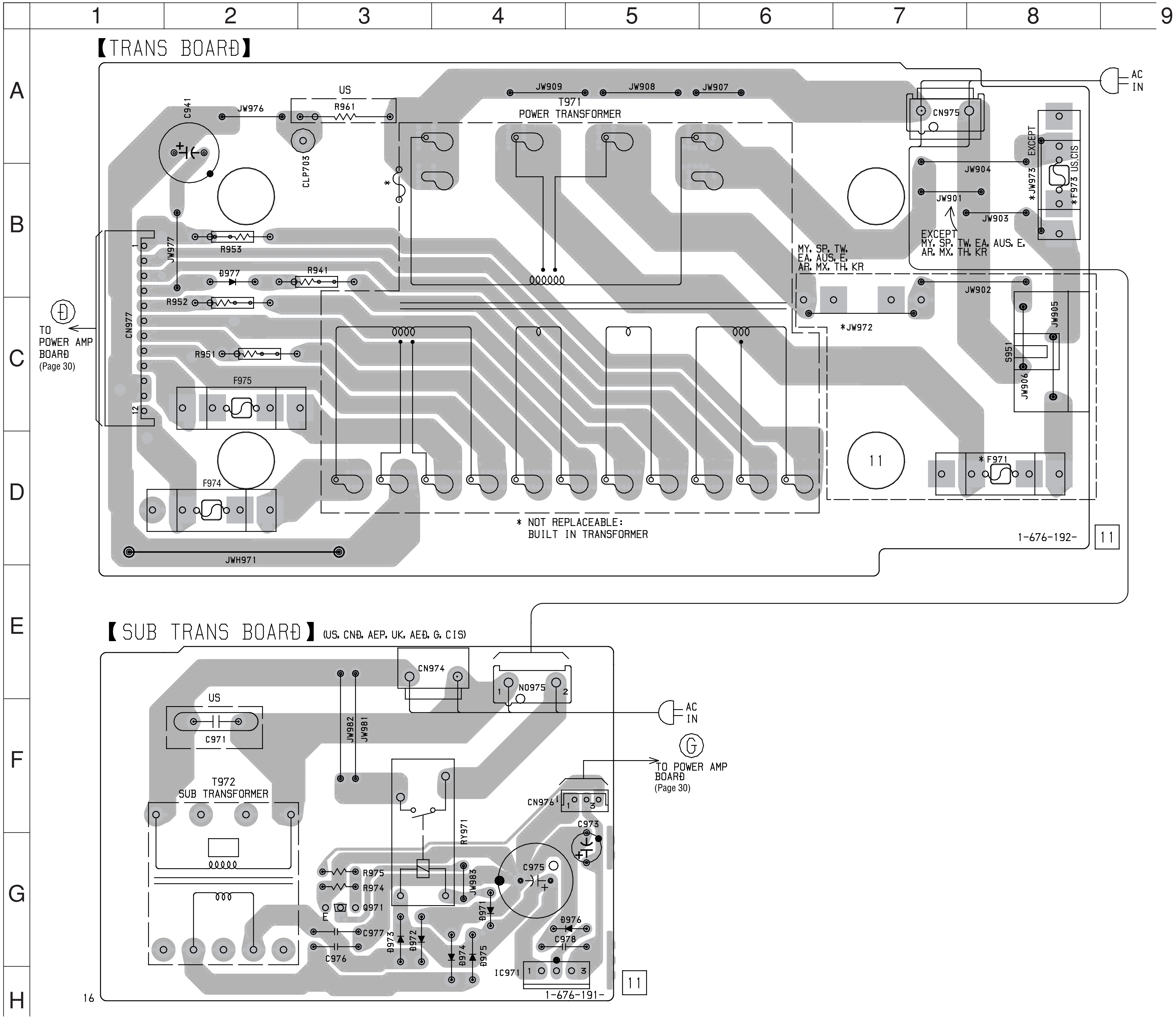

1
2
3
4
5
6
7
8
9
10
A
B
C
D
【ADDRESS SENSER BOARD】
IC711
RPI-321
R711
75k
R713
10k
R712
220
4.9
4.7
CN711
4PM
IC711
TBL ADDRESS SENS
S711
PUSH SWITCH
(UP DOWN SW)
16
D+5V
BU UP/DOWN SW
TBL ADDRESS SENS
DGND
【MOTOR BOARD】
M721
(TURN MOTOR)
M
C721
0.01
S701
SLIDE SWITCH
OPEN/CLOSE SW
CN722
4PM
CN721
8P
MTR+
MTR-
D+5V
OPEN SW
CLOSE SW
BU UP/DOWN SW
TBL ADDRESS SENS
DGND
【DRIVER BOARD】
IC701
MOTOR DRIVER
IC701
BA6956AN
VREF
OUT2
RNF
OUT1
VM
VCC
FIN
GND
RIN
3.7
0.2
0.2
7.2
7.2
0
0
R702
47
D701
MTZJ-3.3B
R701
330
C702
10
50V
CN701
10P
CN702
8PM
MGND
MTR CNT2
MTR CNT1
M+7V
D+5V
OPEN SW
CLOSE SW
BU UP/DOWN SW
TBL ADDRESS SENS
DGND
K
TO MAIN BOARD

7-17. PRINTED WIRING BOARD TRANS SECTION

• See page page 21 for Circuit Boards Location.

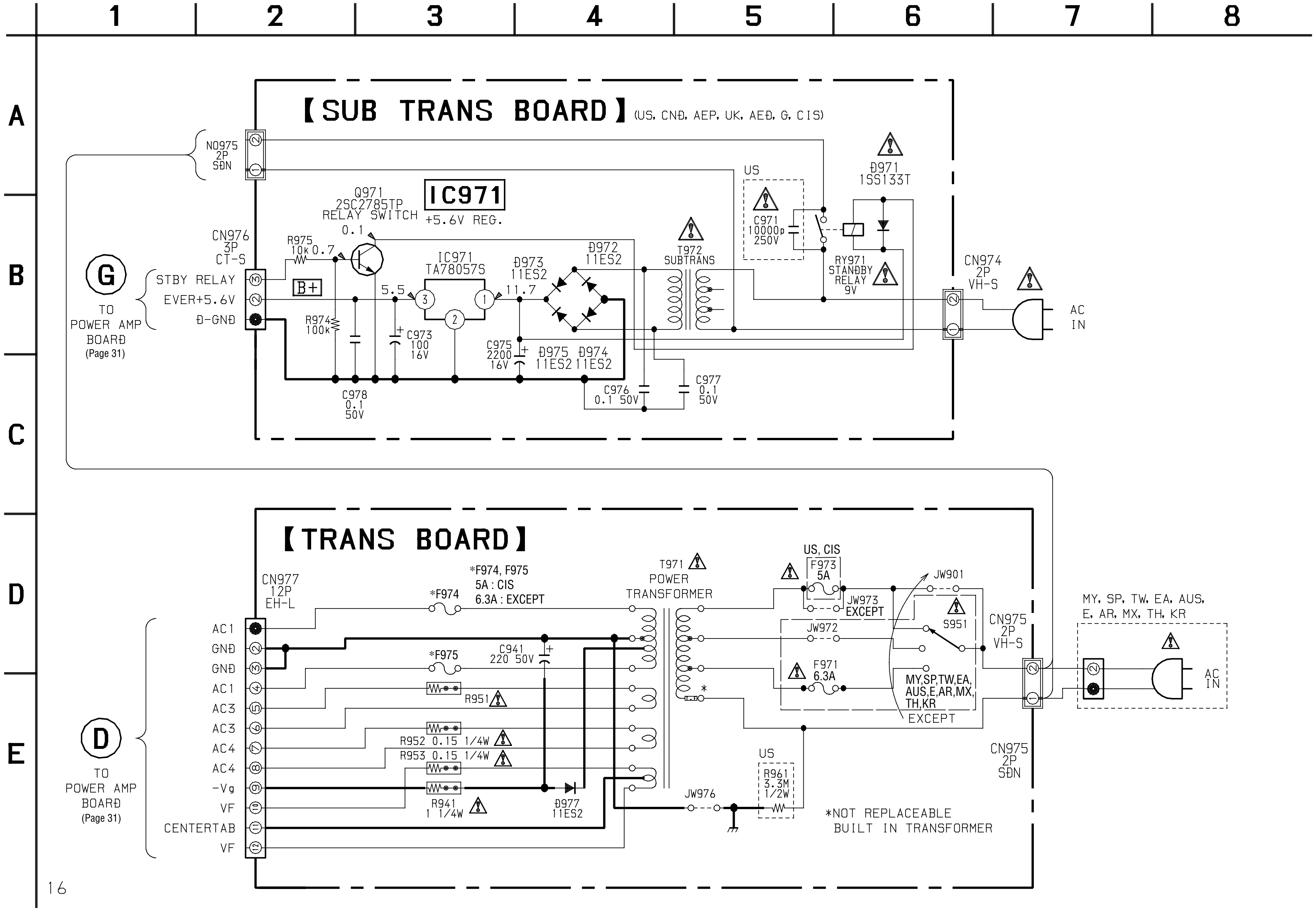
• Semiconductor Location

Ref. No.	Location
D971	G-4
D972	G-3
D973	G-3
D974	G-4
D975	G-4
D976	G-5
D977	B-2
IC971	G-4
Q971	G-3



1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
G
H
【TRANS BOARD】
JW909
JW908
JW907
T971
POWER TRANSFORMER
US
R961
C941
JW976
CLP703
CN975
AC IN
EXCEPT
JW904
JW901
JW903
*JW973
*F973 US,CIS
EXCEPT MY, SP, TW, EA, AUS, E, AR, MX, TH, KR
MY, SP, TW, EA, AUS, E, AR, MX, TH, KR
JW902
*JW972
JW905
S951
JW906
JW977
R953
D977
R941
R952
CN977
1
12
Ⓓ
TO POWER AMP BOARD
(Page 30)
R951
F975
F974
11
*F971
* NOT REPLACEABLE: BUILT IN TRANSFORMER
1-676-192-
11
JWH971
【SUB TRANS BOARD】 (US, CND, AEP, UK, AED, G, CIS)
CN974
N0975
1
2
AC IN
US
C971
JW982
JW981
Ⓖ
TO POWER AMP BOARD
(Page 30)
T972
SUB TRANSFORMER
RY971
CN976
1
3
C973
C975
R975
R974
Q971
E
JW983
D971
C977
D973
D972
D974
D975
D976
C978
C976
IC971
1
3
11
1-676-191-
16

7-18. SCHEMATIC DIAGRAM TRANS SECTION


1
2
3
4
5
6
7
8
A
B
C
D
E
【SUB TRANS BOARD】(US, CND, AEP, UK, AED, G, CIS)
N0975 2P SDN
CN976 3P CT-S
G
TO POWER AMP BOARD
(Page 31)
STBY RELAY
EVER+5.6V
D-GND
Q971 2SC2785TP RELAY SWITCH
0.1
0.7
IC971
+5.6V REG.
R975 10k
B+
R974 100k
IC971 TA78057S
5.5
11.7
D973 11ES2
D972 11ES2
C973 100 16V
C975 2200 16V
D975 11ES2
D974 11ES2
C978 0.1 50V
C976 0.1 50V
C977 0.1 50V
T972 SUBTRANS
US
C971 10000p 250V
D971 1SS133T
RY971 STANDBY RELAY 9V
CN974 2P VH-S
AC IN
【TRANS BOARD】
CN977 12P EH-L
D
TO POWER AMP BOARD
(Page 31)
AC1
GND
GND
AC1
AC3
AC3
AC4
AC4
-Vg
VF
CENTERTAB
VF
*F974, F975
5A : CIS
6.3A : EXCEPT
*F974
*F975
C941 220 50V
R951
R952 0.15 1/4W
R953 0.15 1/4W
R941 1 1/4W
D977 11ES2
T971 POWER TRANSFORMER
US, CIS
F973 5A
JW973 EXCEPT
JW901
JW972
S951
F971 6.3A
MY,SP,TW,EA, AUS,E,AR,MX, TH,KR
EXCEPT
CN975 2P VH-S
CN975 2P SDN
MY, SP, TW, EA, AUS, E, AR, MX, TH, KR
AC IN
US
R961 3.3M 1/2W
JW976
*NOT REPLACEABLE BUILT IN TRANSFORMER
16

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

7-19. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC401 M30622MAA-A25FP (MASTER CONTROL)

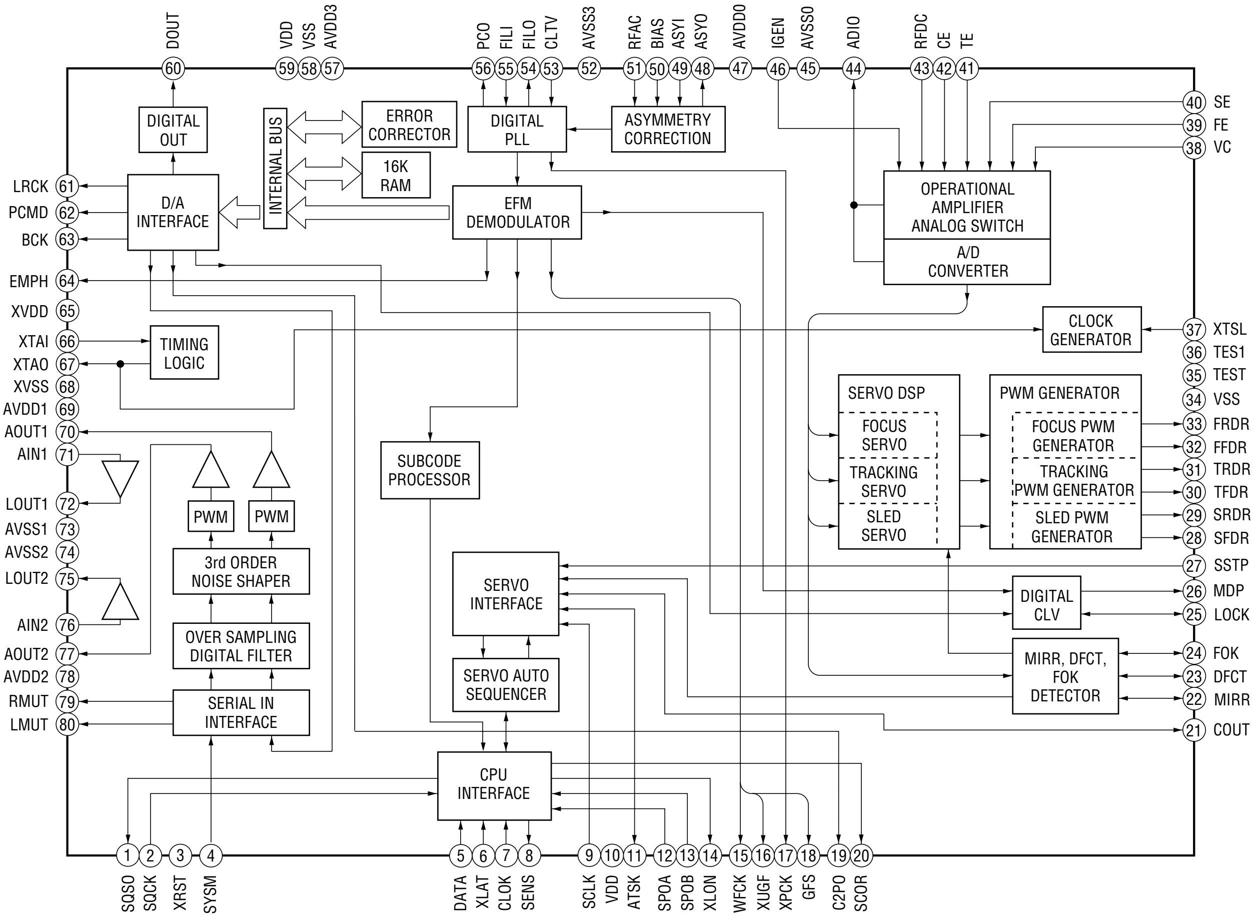
Pin No.	Pin Name	I/O	Description
1	SURROUND 1	O	Not used.
2	SURROUND 2	O	Not used.
3	SURROUND 3	O	Not used.
4	498-DATA	O	Data signal output for IC101 (M61504FP)
5	498-CLK	O	Clock signal output for IC101 (M61504FP)
6	N.C	I	Not used.
7	AC-CUT	I	AC CUT ON (L) / OFF (H) CHECK
8	GND	—	Connected to ground.
9	GND	—	Connected to ground.
10	XC IN	I	SUB CLOCK input. (32.768kHz)
11	XC OUT	O	SUB CLOCK output. (32.768kHz)
12	RESET	I	System reset input.
13	X-OUT	O	MAIN SYSTEM CLOCK output. (16MHz)
14	VSS	—	Vss
15	X-IN	I	MAIN SYSTEM CLOCK input. (16MHz)
16	VCC	—	Power supply. (+5V)
17	NMI	I	PULL UP (EVER +5V)
18	WAKE_UP	I	WAKE UP signal input. (L)
19	SCOR	I	CD Q-data request signal input.
20	RDS-INT	I	RDS interrupt signal input.
21	RDS-DATA	I	RDS data signal input.
22	ST-MUTE	O	Tuner mute signal output.
23	STEREO	I	STEREO detect signal input. L=ON, H=OF
24	TUNED	I	TUNED detect signal input. L=ON, H=OFF
25	ST-CE	O	TUNER chip eneble output.
26	ST-DOUT	O	TUNER data output.
27	ST-DIN	I	TUNER data input.
28	ST-CLK	O	TUNER clock signal output.
29	IIC_CLK	O	IIC SCL output.
30	IIC_DATA	O	IIC SDA output.
31	TXDI	—	Not used.
32	SQ-DATA	I	Subcode Q data input. (CD data)
33	SQ-CLK	I	Subcode Q data input. (CD clock)
34	RST1	I	Not used.
35	CD-DATA	O	CD data input.
36	N.C	I	Not used.
37	CD-CLK	O	CD clock input.
38	N.C	I	Not used.
39	CLOCK-OUT	I	Clock check signal input.
40	SENS	I	BD condition signal input.
41	HOLD	O	MODE signal input.
42	XLT	O	CD latch signal output.
43	XRST	O	CD reset signal output.
44	LOAD-IN	I	Loading motor control signal input.
45	LOAD-OUT	O	Loading motor control signal output.
46	OPEN	I	Tray open detect signal input.
47	CLOSE	I	Tray close detect signal input.
48	UP/DOWN SW	I	Pick-up up/down detect signal input.
49	T-SENS	I	CD table detect signal input.
50	TEST MODE	I	Not used.
51	N.C	I	Not used.
52	N.C	I	Not used.
53	N.C	I	Not used.
54	N.C	I	Not used.
55	N.C	I	Not used.
56	N.C	I	Not used.
57	A TRIG	O	A deck trigger control signal output.H=ON, L-OFF
58	B TRIG	O	B deck trigger control signal output.H=ON, L-OFF
59	CAPM-H/L	O	Capstan motor High/Low speed control signal output.
60	CAPM-CONT	O	Capstan motor REV/FWD/STOP control signal output.H=REV, L=FWD/STOP
61	N.C	I	Not used.
62	VCC	—	POWER SUPPLY (+5V)
63	N.C	I	Not used.
64	VSS	—	Ground.
65	N.C	I	Not used.
66	N.C	I	Not used.
67	A HALF	I	A deck half detect signal input.
68	A PLAY	I	A deck play detect signal input.
69	B PLAY	I	B deck play detect signal input.
70	AMS-IN	I	AMS signal input. L=ON,H=OFF
71	TC-MUTE	O	Tape deck line mute ON/OFF signal output. H=ON, L=OFF
72	R/PB/PAS	I	REC/PB/PASS select signal input.
73	NR-ON/OFF	O	DOLBY NR ON/OFF signal output. H=ON, L=OFF
74	REC-MUTE	O	REC mute ON/OFF signal output. L=ON, H=OFF
75	BAIS	O	BIAS ON/OFF signal output.H=ON, L=OFF
76	EQ-H/N	O	EQ High/Normal select signal output. H=High, L=Normal
77	PB-A/B	O	Playback deckA/B select signal output. H=deckB, L=deckA
78	ALC	O	ALC ON/OFF signal output. L=ON, H=OFF
79	TC-RELAY	O	Tape deck relay ON/OFF signal output. H=ON, L=OFF
80	N.C	I	Not used.
81	STBY-RELAY	O	STANDBY relay control signal output.
82	PROTECT	I	Speaker protect signal input. L=ON, H=OFF
83	DBFB-ON/OFF	I	Not used.
84	LINE-MUTE	O	Line mute signal output. L=ON, H=OFF
85	CD-POWER	O	CD-POWER ON/OFF signal output. H=ON, L=OFF
86	F-SHIFT	O	Not used.
87	RELAY-H	O	Speaker terminal relay control signal output. H=ON, L=OFF
88	POWER	O	POWER ON/OFF signal output. H=ON, L=OFF
89	N.C	O	Not used.
90	A SHUT	O	A deck reel pulse detect signal output.
91	B SHUT	O	B deck reel pulse detect signal output.
92	SOFT-TEST	O	Not used.
93	B HALF	O	B deck half detect signal input.
94	KEY/CD ADJ	O	KEY (for jig) / CD adjust.
95	MODEL-IN	I	MODEL input.
96	AVSS	—	Analog ground.
97	SPEC-IN	I	Version select signal input.
98	VREF	—	Analog Reference Voltage
99	AVCC	—	Analog Power Supply
100	STK-MUTE	O	Power amplifier mute ON/OFF signal output. H=ON, L=OFF

• PANEL BOARD IC601 TMP88CP77F-1A22 (DISPLAY CONTROL)

Pin No.	Pin Name	I/O	Description
1	VOLUME A	I	VOLUME A signal input.
2	VOLUME B	I	VOLUME B signal input.
3	HEADPHONE	I	Head phone detect signal input. H=ON, L=OFF
4	N.C	I	Not used.
5	TUNER	O	TUNER LED driver output.(high active)
6	CD	O	CD LED driver output.(high active)
7	TAPE A/B	O	TAPE A/B LED driver output.(high active)
8	MD/VIDEO	O	MD/VIDEO LED driver output.(high active)
9-10	N.C	O	Not used.
11	GROOVE	O	GROOVE LED driver output.(high active)
12-14	N.C	O	Not used.
15	REC/PAUSE	O	REC/PAUSE LED driver output.(high active)
16	SURROUND	O	SURROUND LED driver output.(high active)
17-19	KEY0-2	I	KEY input. (AD)
20	Super Low Freq (BPF 0)	I	BPF input. (AD)
21-25	BPF1-5	I	BPF input. (AD)
26	ALL BAND	I	BPF input. (AD)
27	TIMER	O	TIMER SEL LED driver output.
28	STANDBY	O	STANDBY LED output.
29	VSS	—	Ground.
30	VASS	—	Ground.
31	AVREF	—	Analog reference voltage.
32	VDD	—	Power supply (+5V)
33-49	G17-1	O	FL gride signal output.
50	P1	O	FL segment signal output.
51	VDD VFT	—	Power supply (+5V)
52-85	P2-35	O	FL segment signal output.
86	N.C	I	Not used.
87	VKK	—	–]30V driving power for FL.
88	VDD	—	Power supply (+5V)
89	Xin	I	12.5MHz (Xin)
90	VSS	—	Ground.
91	Xout	O	12.5MHz (Xout)
92	RESET	I	RESET (low active)
93-94	N.C	I	Not used.
95	TEST	I	Connected to ground.
96	WAKE UP	O	WAKE UP signal output for master controller. (PULL UP)
97	I2C data	O	IIC SDA
98	I2C clk	O	IIC SCL
99	N.C	I	Not used.
100	SIRCS	I	Remote commander input. (input capture)

7-20. IC BLOCK DIAGRAMS

IC101 CXD2587Q (BD BOARD)


DOUT
VDD
VSS
AVDD3
PCO
FILI
FILO
CLTV
AVSS3
RFAC
BIAS
ASYI
ASYO
AVDD0
IGEN
AVSS0
ADIO
RFDC
CE
TE
DIGITAL OUT
INTERNAL BUS
ERROR CORRECTOR
16K RAM
DIGITAL PLL
ASYMMETRY CORRECTION
D/A INTERFACE
EFM DEMODULATOR
OPERATIONAL AMPLIFIER ANALOG SWITCH
A/D CONVERTER
SE
FE
VC
LRCK
PCMD
BCK
EMPH
XVDD
XTAI
XTAO
XVSS
AVDD1
AOUT1
AIN1
LOUT1
AVSS1
AVSS2
LOUT2
AIN2
AOUT2
AVDD2
RMUT
LMUT
TIMING LOGIC
CLOCK GENERATOR
XTSL
TES1
TEST
VSS
SERVO DSP
FOCUS SERVO
TRACKING SERVO
SLED SERVO
PWM GENERATOR
FOCUS PWM GENERATOR
TRACKING PWM GENERATOR
SLED PWM GENERATOR
FRDR
FFDR
TRDR
TFDR
SRDR
SFDR
SSTP
MDP
LOCK
FOK
DFCT
MIRR
COUT
SUBCODE PROCESSOR
PWM
PWM
3rd ORDER NOISE SHAPER
OVER SAMPLING DIGITAL FILTER
SERIAL IN INTERFACE
SERVO INTERFACE
SERVO AUTO SEQUENCER
DIGITAL CLV
MIRR, DFCT, FOK DETECTOR
CPU INTERFACE
SQSO
SQCK
XRST
SYSM
DATA
XLAT
CLOK
SENS
SCLK
VDD
ATSK
SPOA
SPOB
XLON
WFCK
XUGF
XPCK
GFS
C2PO
SCOR
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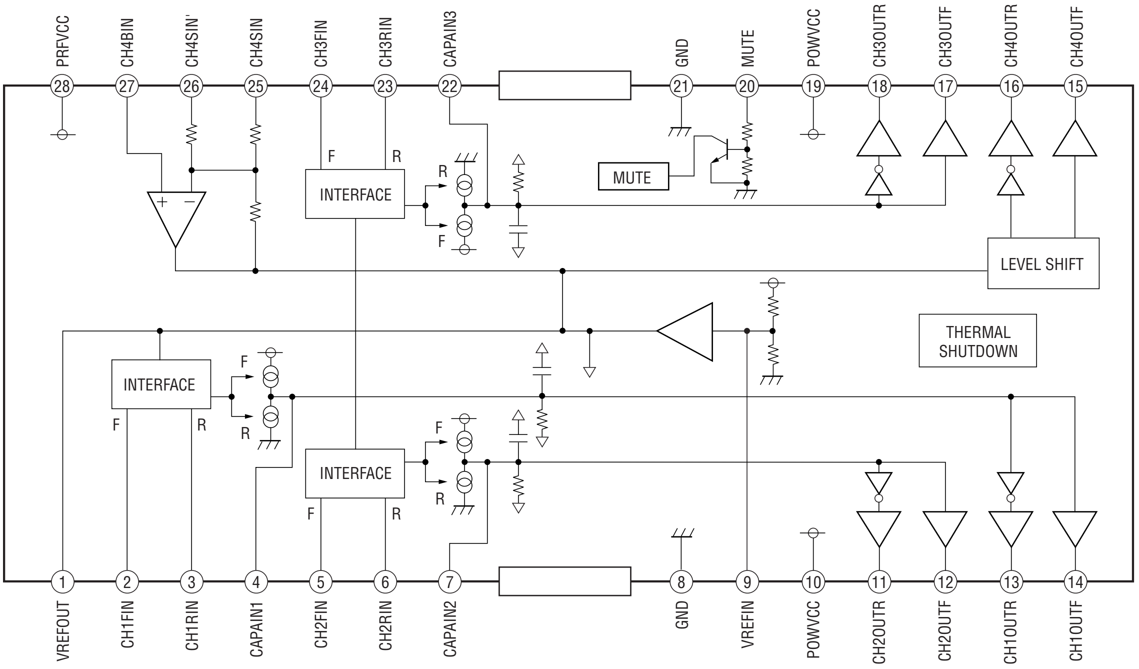
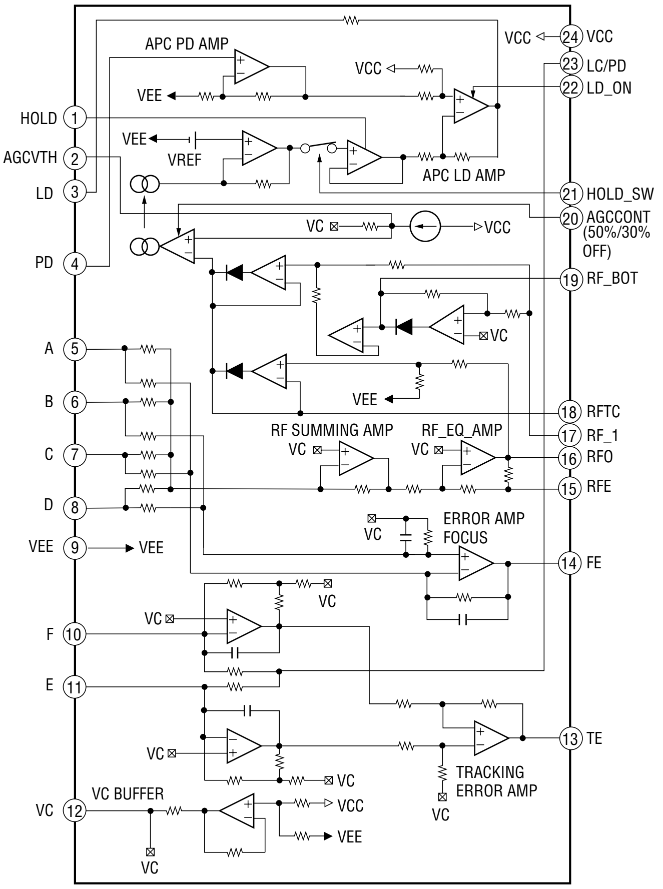
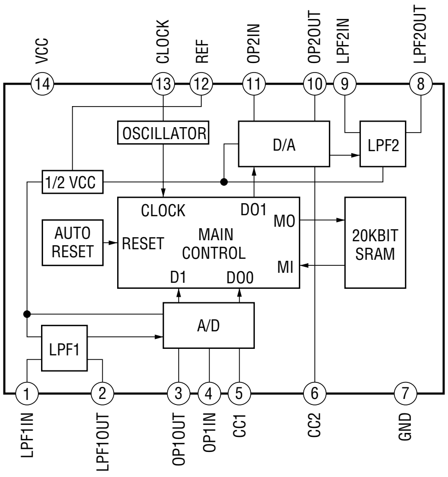
IC102 BA5974FP (BD BOARD)


PRFVCC
CH4BIN
CH4SIN'
CH4SIN
CH3FIN
CH3RIN
CAPAIN3
GND
MUTE
POWVCC
CH3OUTR
CH3OUTF
CH4OUTR
CH4OUTF
28
27
26
25
24
23
22
21
20
19
18
17
16
15
F
R
INTERFACE
R
F
MUTE
LEVEL SHIFT
THERMAL SHUTDOWN
INTERFACE
F
R
F
R
INTERFACE
F
R
F
R
1
2
3
4
5
6
7
8
9
10
11
12
13
14
VREFOUT
CH1FIN
CH1RIN
CAPAIN1
CH2FIN
CH2RIN
CAPAIN2
GND
VREFIN
POWVCC
CH2OUTR
CH2OUTF
CH1OUTR
CH1OUTF

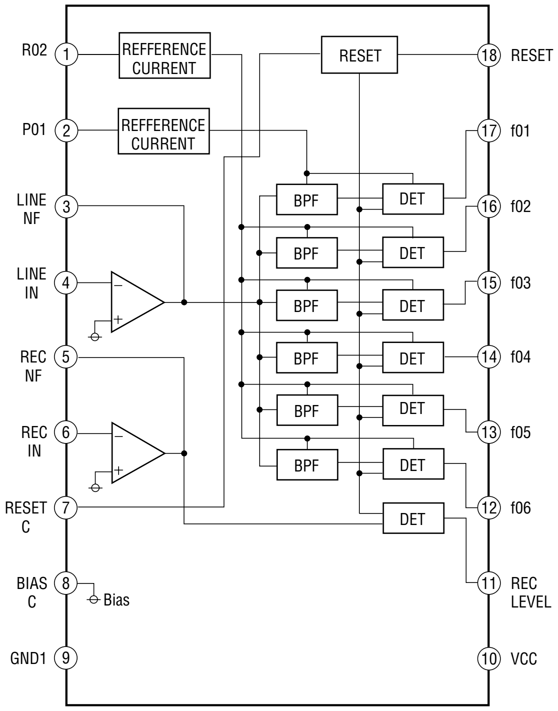
IC103 CXA2568M (BD BOARD)


APC PD AMP
VCC
VEE
HOLD 1
AGCVTH 2
LD 3
VREF
PD 4
A 5
B 6
C 7
D 8
VEE 9
F 10
E 11
VC 12
24 VCC
23 LC/PD
22 LD_ON
APC LD AMP
21 HOLD_SW
20 AGCCONT (50%/30% OFF)
19 RF_BOT
18 RFTC
17 RF_1
16 RFO
15 RFE
14 FE
13 TE
RF SUMMING AMP
RF_EQ_AMP
ERROR AMP FOCUS
TRACKING ERROR AMP
VC BUFFER
VC

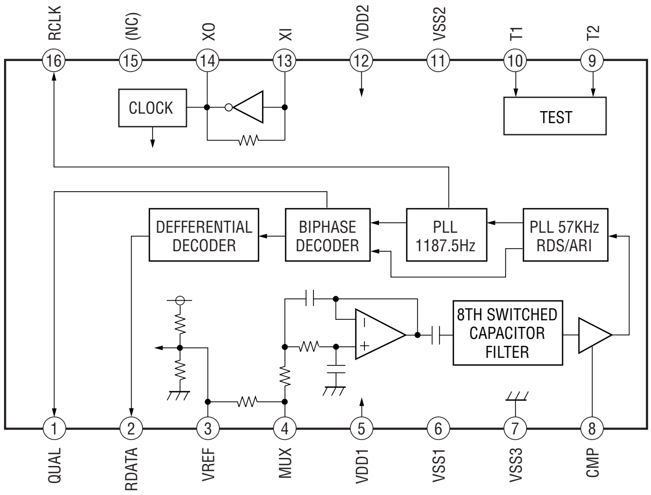
IC101 M62498FP (MAIN BOARD)


VCC 14
CLOCK 13
REF 12
OP2IN 11
OP2OUT 10
LPF2IN 9
LPF2OUT 8
OSCILLATOR
D/A
LPF2
1/2 VCC
CLOCK
D01
MO
MAIN CONTROL
AUTO RESET
RESET
D1
DO0
MI
20KBIT SRAM
A/D
LPF1
1 LPF1IN
2 LPF1OUT
3 OP1OUT
4 OP1IN
5 CC1
6 CC2
7 GND

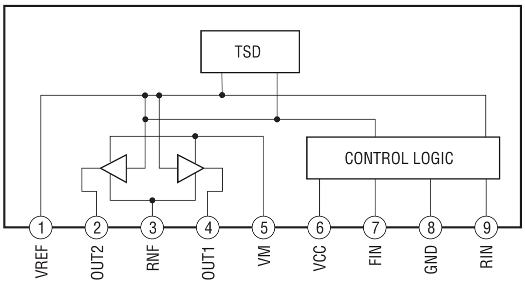
IC602 BA3830F (PANEL BOARD)


R02 1
P01 2
LINE NF 3
LINE IN 4
REC NF 5
REC IN 6
RESET C 7
BIAS C 8
Bias
GND1 9
REFFERENCE CURRENT
REFFERENCE CURRENT
RESET
BPF
DET
18 RESET
17 f01
16 f02
15 f03
14 f04
13 f05
12 f06
11 REC LEVEL
10 VCC

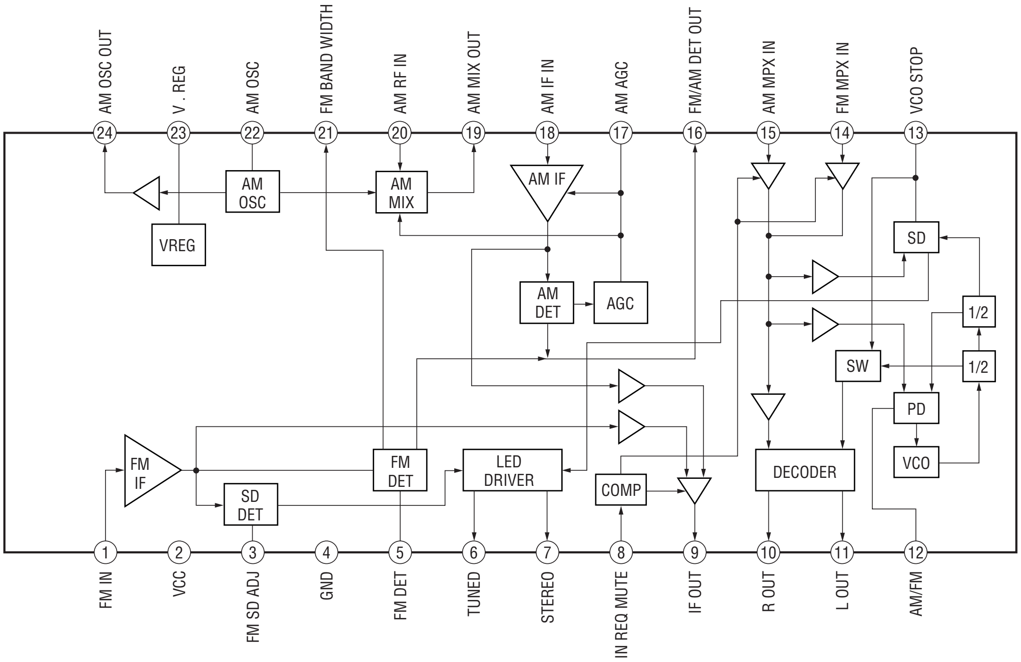
IC682 BU1924 (MAIN BOARD)


RCLK 16
(NC) 15
XO 14
XI 13
VDD2 12
VSS2 11
T1 10
T2 9
CLOCK
TEST
DEFFERENTIAL DECODER
BIPHASE DECODER
PLL 1187.5Hz
PLL 57KHz RDS/ARI
8TH SWITCHED CAPACITOR FILTER
1 QUAL
2 RDATA
3 VREF
4 MUX
5 VDD1
6 VSS1
7 VSS3
8 CMP

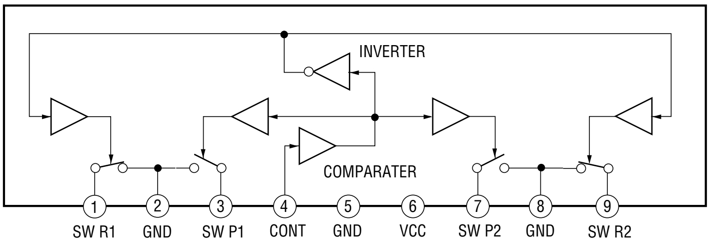
IC701 BA6956AN (DRIVER BOARD)


TSD
CONTROL LOGIC
1 VREF
2 OUT2
3 RNF
4 OUT1
5 VM
6 VCC
7 FIN
8 GND
9 RIN

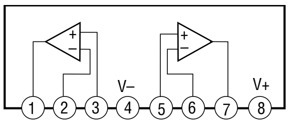
IC601 BA1450 (MAIN BOARD)


AM OSC OUT
V . REG
AM OSC
FM BAND WIDTH
AM RF IN
AM MIX OUT
AM IF IN
AM AGC
FM/AM DET OUT
AM MPX IN
FM MPX IN
VCO STOP
AM OSC
AM MIX
AM IF
VREG
SD
AM DET
AGC
1/2
SW
1/2
PD
FM IF
FM DET
LED DRIVER
COMP
DECODER
VCO
SD DET
FM IN
VCC
FM SD ADJ
GND
FM DET
TUNED
STEREO
IN REQ MUTE
IF OUT
R OUT
L OUT
AM/FM

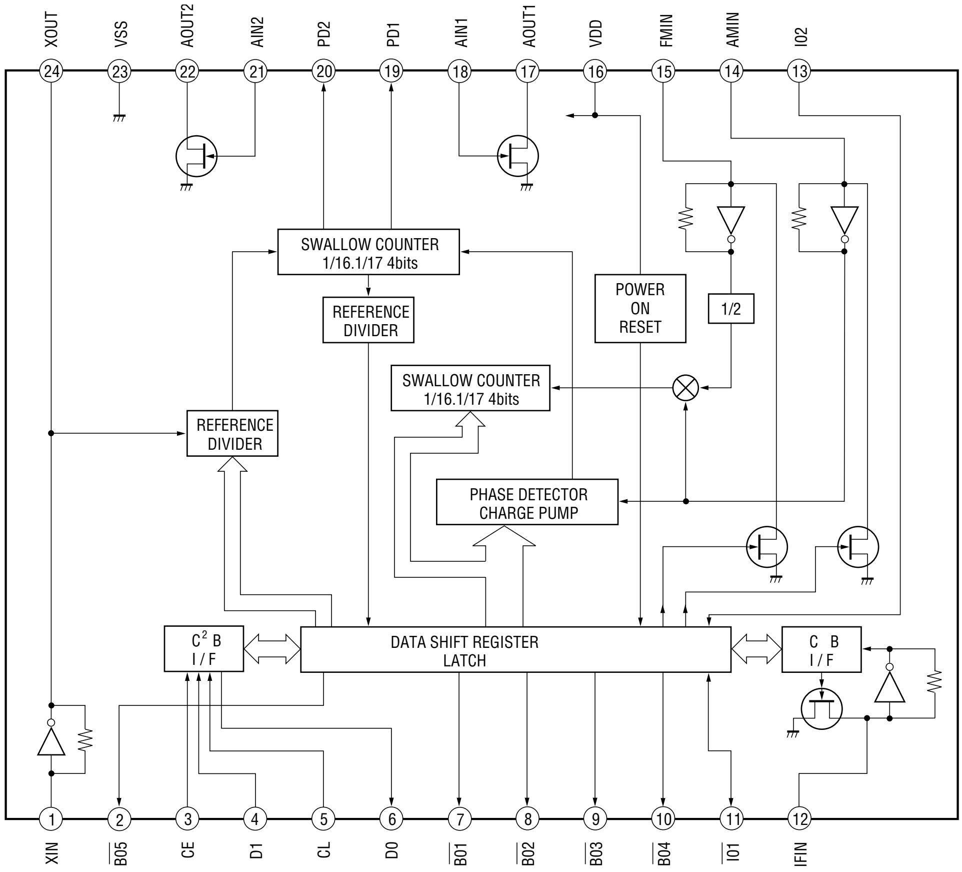
IC302 μPC1330H (MAIN BOARD)


INVERTER
COMPARATER
SW R1
GND
SW P1
CONT
GND
VCC
SW P2
GND
SW R2

IC681 M5218AFP (MAIN BOARD)



IC651 LC72130 (MAIN BOARD)


XOUT
VSS
AOUT2
AIN2
PD2
PD1
AIN1
AOUT1
VDD
FMIN
AMIN
I02
SWALLOW COUNTER 1/16.1/17 4bits
REFERENCE DIVIDER
POWER ON RESET
1/2
SWALLOW COUNTER 1/16.1/17 4bits
REFERENCE DIVIDER
PHASE DETECTOR CHARGE PUMP
C² B I / F
DATA SHIFT REGISTER LATCH
C B I / F
XIN
B05
CE
D1
CL
D0
B01
B02
B03
B04
I01
IFIN

SECTION 8
EXPLODED VIEWS

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

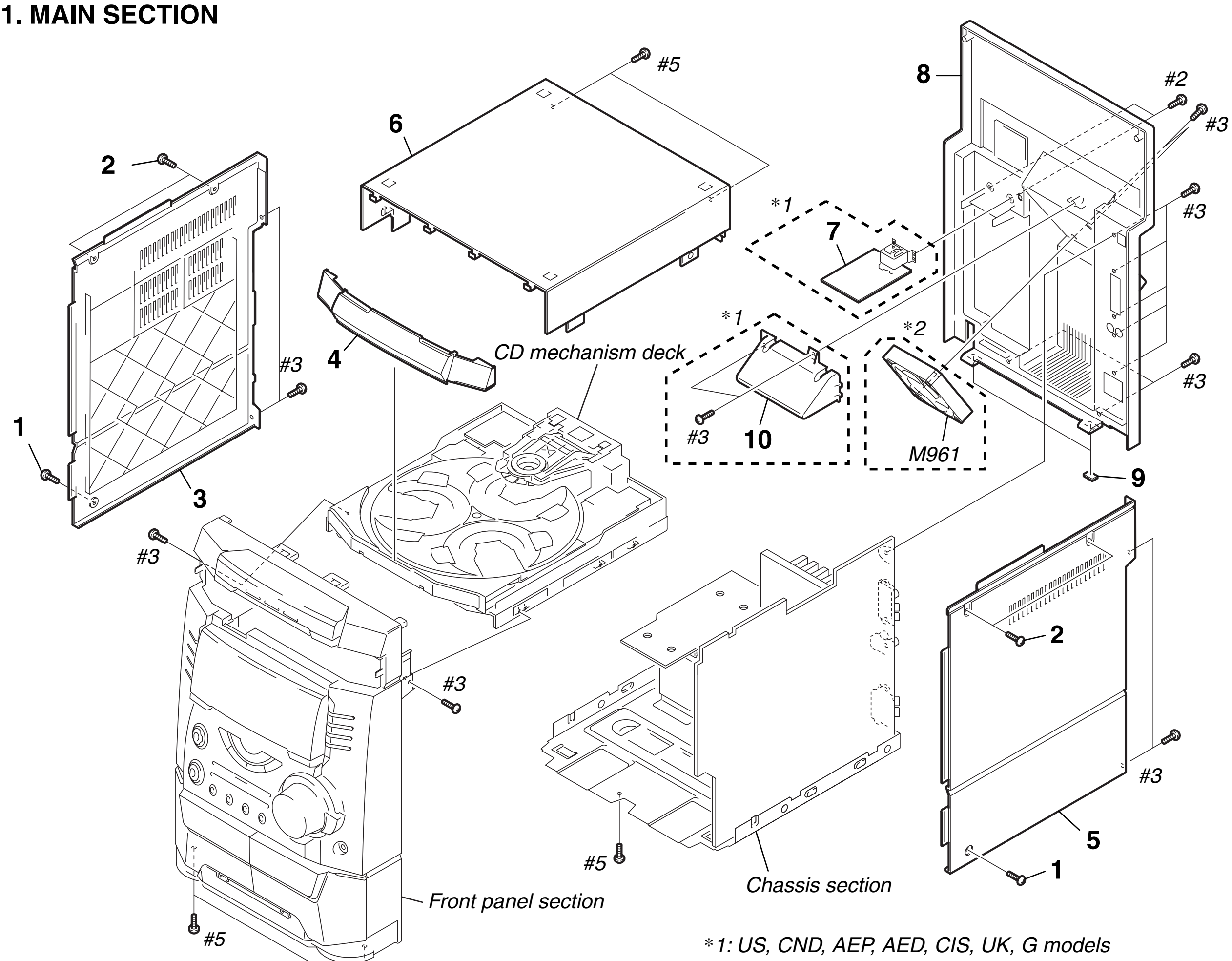
- Abbreviation

CND : Canadian model
AUS : Australian model
G : German model
AED : North European model
EA : Saudi Arabia model
MY : Malaysia model
SP : Singapore model
TH : Thai model
TW : Taiwan model
KR : Korea model
MX : Mexican model
AR : Argentina model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

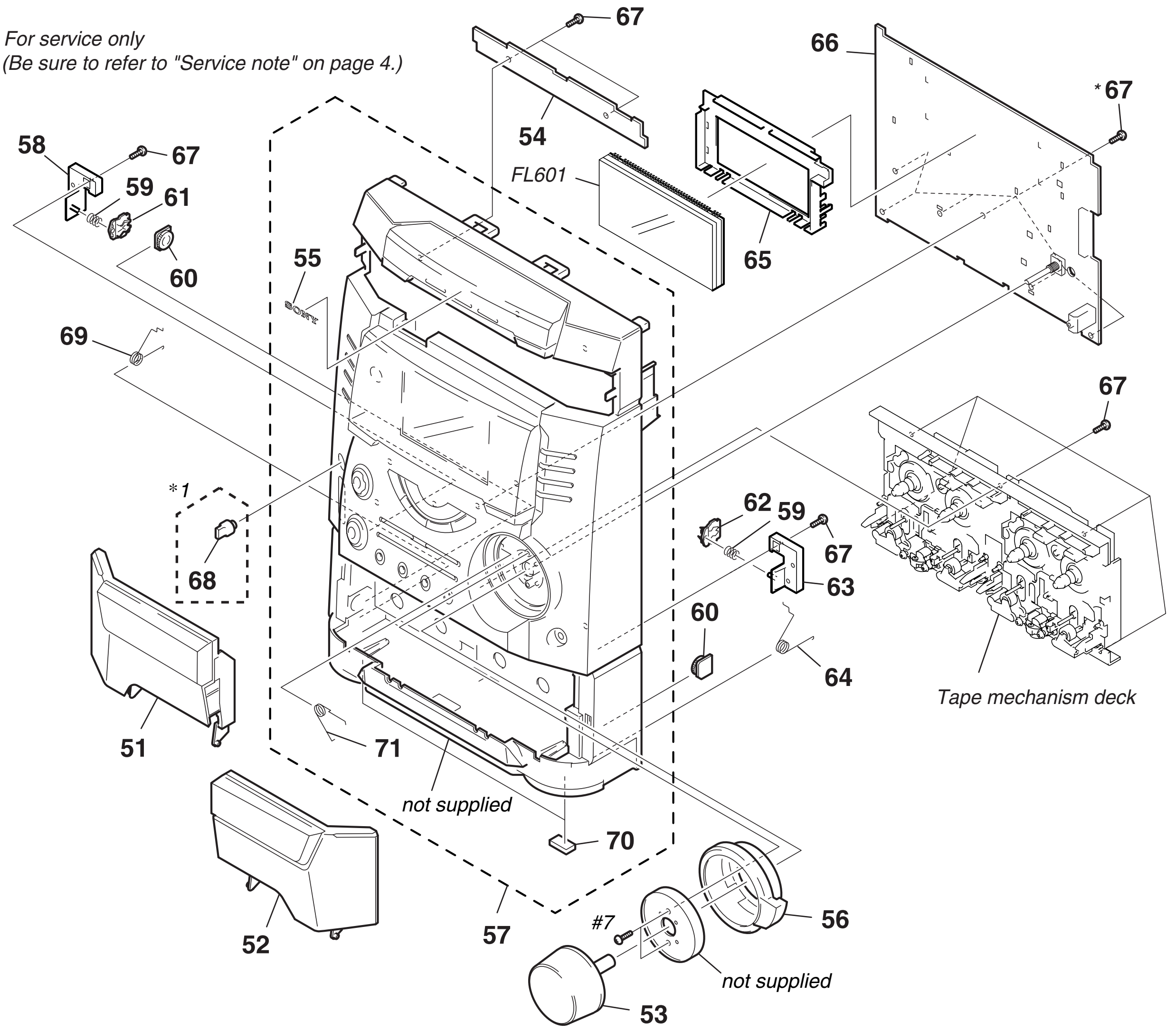
8-1. MAIN SECTION



*1: US, CND, AEP, AED, CIS, UK, G models
*2: E, EA, AR, AUS, KR, MX, MY, SP, TH, TW models

Ref. No.	Part No.	Description	Remarks
1	3-363-099-01	SCREW(CASE 3 TP2)	
2	3-363-099-41	SCREW(CASE 3 TP2)	
3	4-225-038-01	SIDE PANEL L (AED,AEP,CIS,CND,UK,G,US,KR,TH)	
3	4-225-038-21	SIDE PANEL L (AR,AUS,E,EA,MX,MY,SP,TH,TW)	
4	4-225-017-01	LOADING PANEL (AED,AEP,CIS,CND,UK,G,US)	
4	4-225-017-11	LOADING PANEL (AR,AUS,E,KR,MX,MY,SP,TH,TW)	
4	4-225-017-21	LOADING PANEL (EA)	
5	4-225-039-01	SIDE PANEL R (AED,AEP,CIS,CND,UK,G,US,KR,TH)	
5	4-225-039-21	SIDE PANEL R (AR,AUS,E,EA,MX,MY,SP,TH,TW)	
6	4-224-550-01	UPPER CASE (TOP) (EXCEPT US,CND)	
6	4-224-550-21	UPPER CASE (TOP) (US,CND)	
7	A-4428-082-A	SUB-TRANS BOARD,COMPLETE (AED,AEP,CIS,UK,G)	
7	A-4428-088-A	SUB-TRANS BOARD,COMPLETE (US)	
7	A-4428-959-A	SUB-TRANS BOARD,COMPLETE (CND)	
8	4-225-040-01	BACK PANEL (AED,AEP,CIS,UK,G,AUS,KR,MX,TH)	
8	4-225-040-11	BACK PANEL (AR,E,EA,MY,SP,TW)	
8	4-225-040-21	BACK PANEL (US,CND)	
9	4-225-252-01	CUSHION (FOOT)	
10	4-227-467-01	DUCT (B3) (AED,AEP,CIS,CND,UK,US,G)	
M961	1-763-072-11	FAN, D.C. (AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)	

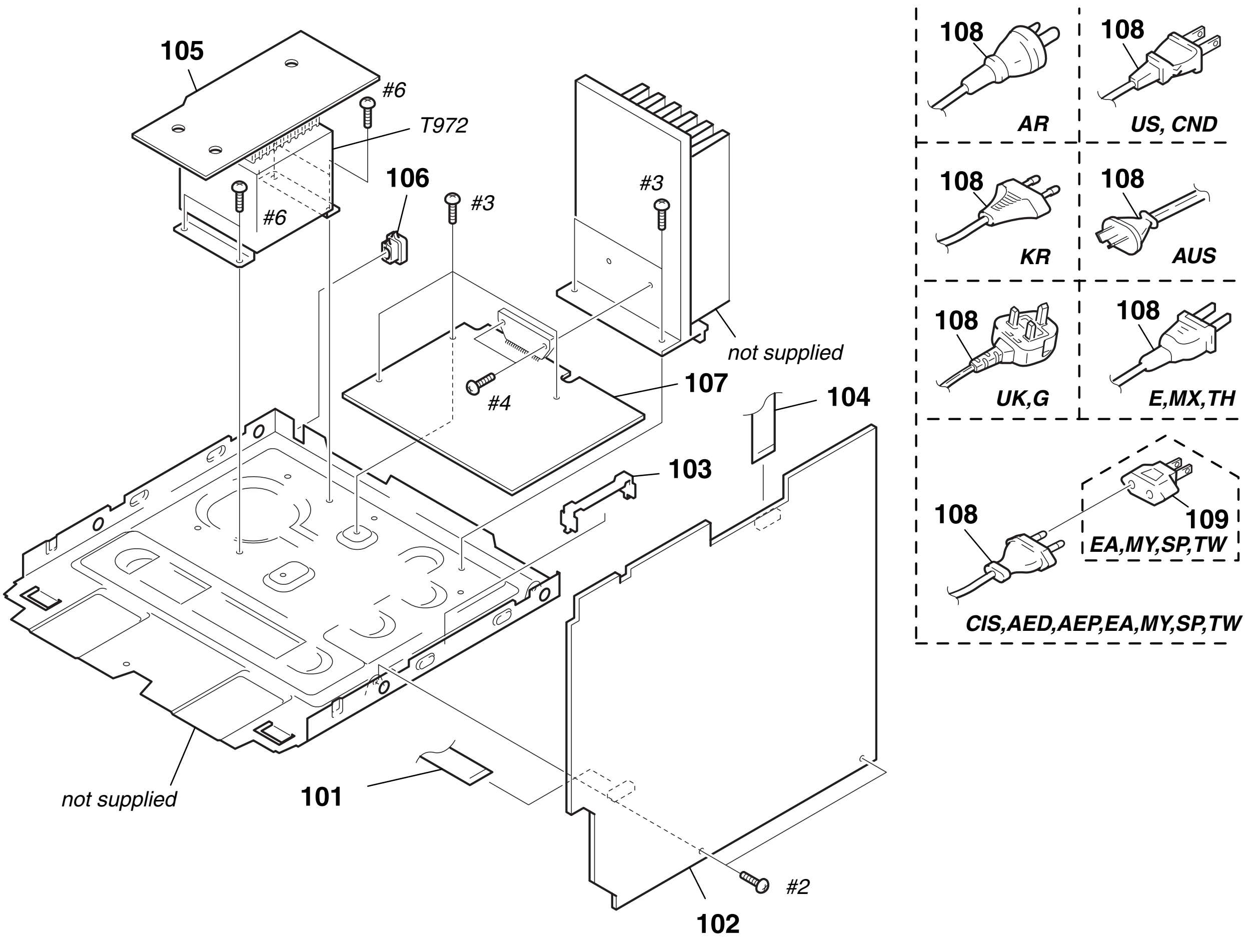
8-2. PANEL SECTION


* For service only
(Be sure to refer to "Service note" on page 4.)

*1: E, EA, AR, AUS, KR, MX, MY, SP, TH, TW models

Ref. No.	Part No.	Description	Remarks
51	X-4952-418-1	TC HOLDER (L) ASSY	
52	X-4952-419-1	TC HOLDER (R) ASSY	
53	4-225-032-01	VOL KNOB	
54	A-4428-077-A	CD SWITCH BOARD,COMPLETE	
55	4-962-708-71	EMBLEM (4-A), SONY	
56	4-225-033-01	FR KNOB	
57	X-4952-415-1	FRONT PANEL ASSY (AED,AEP,CIS,UK,G)	
57	X-4952-416-1	FRONT PANEL ASSY (US,CND)	
57	X-4952-417-1	FRONT PANEL ASSY (AR,AUS,E,KR,MX,MY,SP,TH,TW)	
57	X-4952-594-1	FRONT PANEL ASSY (EA)	
58	4-224-562-01	BRACKET (HEART CAM L)	
59	4-224-803-01	SPRING (PUSH),COMPRESSION COIL	
60	4-224-104-01	DAMPER (TH)	
60	4-224-104-11	DAMPER (EXCEPT TH)	
61	4-224-560-01	CAM(L), HEART	
62	4-224-559-01	CAM(R), HEART	
63	4-224-561-01	BRACKET (HEART CAM R)	
64	4-225-053-01	SPRING R	
65	4-224-584-01	HOLDER (FL)	
66	A-4428-075-A	PANEL BOARD,COMPLETE (AED,AEP,CIS,CND,UK,G,US)	
66	A-4428-092-A	PANEL BOARD,COMPLETE (AR,AUS,E,KR,MX,MY,SP,TW)	
66	A-4428-286-A	PANEL BOARD,COMPLETE (EA)	
66	A-4428-907-A	PANEL BOARD,COMPLETE (TH)	
67	4-951-620-01	SCREW (2.6X8), +BVTP	
68	4-224-578-01	KNOB(MIC)(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)	
69	4-225-052-01	SPRING L	
70	4-225-252-01	CUSHION (FOOT)	
71	4-225-054-01	SPRING FR	
FL601	1-517-928-11	INDICATOR TUBE, FLUORESCENT	

8-3. MAIN BOARD SECTION

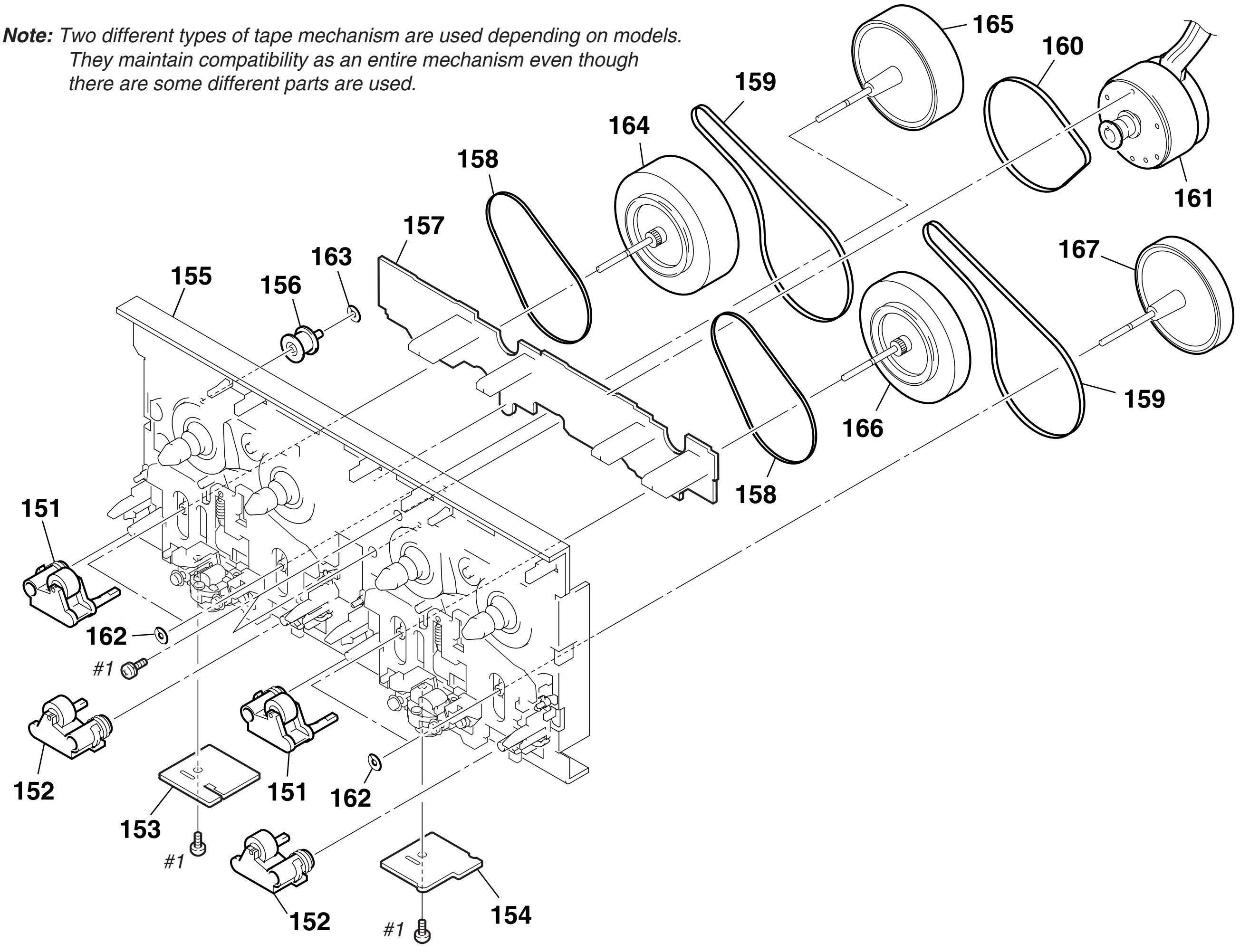


Ref. No.	Part No.	Description	Remarks
101	1-773-045-11	WIRE (FLAT TYPE) (17 CORE)	
102	A-4428-070-A	MAIN BOARD,COMPLETE (AED,AEP,CIS,UK,G)	
102	A-4428-084-A	MAIN BOARD,COMPLETE (CND,US)	
102	A-4428-090-A	MAIN BOARD,COMPLETE (MY,SP,TW)	
102	A-4428-288-A	MAIN BOARD,COMPLETE (EA)	
102	A-4428-290-A	MAIN BOARD,COMPLETE (AUS)	
102	A-4428-292-A	MAIN BOARD,COMPLETE (E)	
102	A-4428-735-A	MAIN BOARD,COMPLETE (AR,MX)	
102	A-4428-910-A	MAIN BOARD,COMPLETE (TH)	
102	A-4428-958-A	MAIN BOARD,COMPLETE (KR)	
* 103	4-988-533-01	HOLDER, PWB	
104	1-773-122-11	WIRE (FLAT TYPE) (19 CORE)	
105	1-676-192-11	TRANS BOARD	
106	3-703-571-11	BUSHING (S) (4516), CORD (E,MX,TH)	
* 106	3-703-244-00	BUSHING (2104), CORD (EXCEPT E,MX,TH)	
107	A-4428-079-A	POWER AMP BOARD,COMPLETE (AED,AEP,CIS,UK,G,US)	
107	A-4428-094-A	POWER AMP BOARD,COMPLETE (AR,AUS,E,EA,KR,MX,MY,SP,TW)	
107	A-4428-336-A	POWER AMP BOARD,COMPLETE (CND)	
107	A-4428-901-A	POWER AMP BOARD,COMPLETE (TH)	
⚠108	1-696-847-11	CORD, POWER (AUS)	
⚠108	1-769-079-21	CORD, POWER (KR)	
⚠108	1-777-071-51	CORD, POWER (AED,AEP,CIS,EA,MY,SP,TW)	
⚠108	1-783-820-11	CORD, POWER (CND,US)	
⚠108	1-783-941-11	CORD, POWER (AR)	
⚠108	1-790-226-11	CORD, POWER (UK,G)	
⚠108	1-791-901-11	CORD, POWER (E,MX,TH)	
109	1-569-008-31	ADAPTOR, CONVERSION (EA,MY,SP,TW)	
⚠T972	1-435-261-11	TRANSFORMER, POWER (AED,AEP,CIS,UK,G)	
⚠T972	1-435-262-11	TRANSFORMER, POWER (AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)	
⚠T972	1-435-263-11	TRANSFORMER, POWER (CND)	
⚠T972	1-435-264-11	TRANSFORMER, POWER (US)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

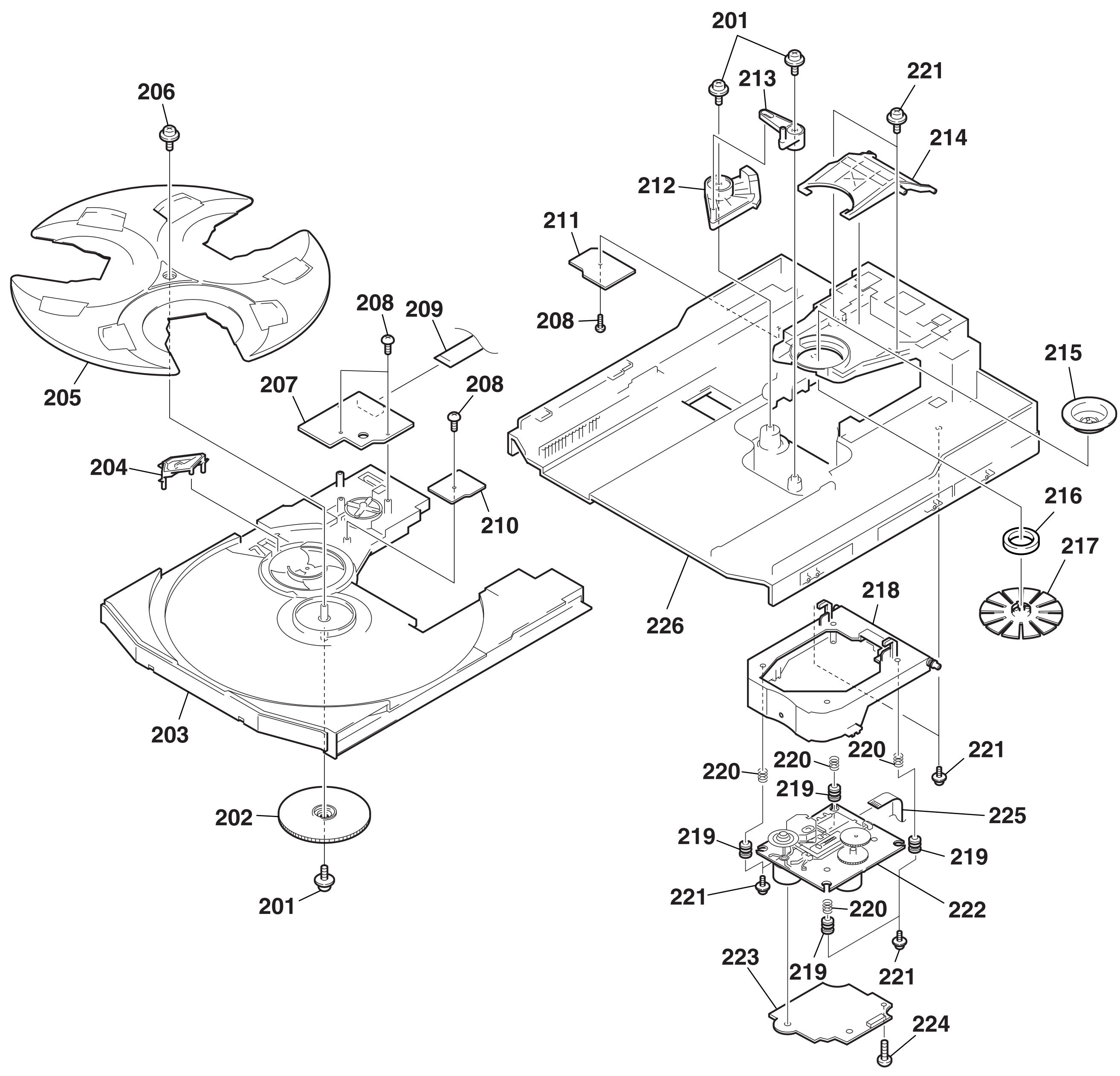
8-4. TAPE MECHANISM DECK SECTION

Note: *Two different types of tape mechanism are used depending on models. They maintain compatibility as an entire mechanism even though there are some different parts are used.*



Ref. No.	Part No.	Description	Remarks
151	X-3374-156-4	PINCH LEVER (REV) ASSY	
152	X-3374-155-4	PINCH LEVER (FWD) ASSY	
153	1-676-220-11	HEAD (A) BOARD	
154	1-676-221-11	HEAD (B) BOARD	
155	A-2004-737-A	MAIN CHASIS ASSY	
156	3-040-580-11	PULLEY (TENSION)	
157	A-2007-838-A	LEAF SW BOARD, COMPLETE	
158	3-041-947-01	BELT (FR)	
159	3-041-946-01	BELT (CAPSTAN B)	
160	4-227-239-01	BELT (CAPSTAN C)	
161	X-3378-241-1	MOTOR ASSY	
162	3-019-208-01	WASHER, STOPPER	
163	3-016-533-01	WASHER (FR), STOPPER	
164	X-3378-041-1	FLYWHEEL (A-REV) ASSY	
165	X-3378-040-1	FLYWHEEL (A-FWD) ASSY	
166	X-3378-043-1	FLYWHEEL (B-REV) ASSY	
167	X-3378-042-1	FLYWHEEL (B-FWD) ASSY	

8-5. CD MECHANISM DECK SECTION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Ref. No.	Part No.	Description	Remarks
201	4-933-134-11	SCREW (+PTPWH M2.6X8)	
202	4-221-679-01	CAM(RELAY)	
203	4-221-675-01	TABLE	
204	4-221-686-01	LEVER (CHANGE)	
205	4-221-676-01	TRAY	
206	4-933-134-51	SCREW (+PTPWH 2.6X8)	
207	1-675-910-11	MOTOR BOARD	
208	4-951-620-01	SCREW (2.6X8), +BVTP	
209	1-791-983-12	WIRE (FLAT TYPE) (8 CORE)	
210	1-675-911-11	ADDRESS SENSOR BOARD	
211	1-675-912-11	DRIVER BOARD	
212	X-4952-608-1	CAM(U/D) ASSY	
213	4-221-681-01	LEVER (EX)	
214	4-221-682-01	LEVER (LIFTER)	
215	4-221-688-01	PULLEY (B), CHUCKING	
216	1-471-035-11	MAGNET ASSY	
217	X-4952-019-1	PULLEY (A) ASSY, CHUCKING	
218	X-4951-889-1	HOLDER (BU) ASSY	
219	4-227-549-01	INSULATOR	
220	4-227-045-11	SPRING (INSULATOR), COIL	
221	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
⚠222	8-820-116-01	OPTICAL PICK-UP BLOCK (KSM-213DAP)	
223	A-4724-934-A	BD BOARD, COMPLETE	
224	4-951-620-01	SCREW (2.6X8), +BVTP	
225	1-792-024-11	WIRE (FLAT TYPE)(16 CORE)	
226	4-221-674-03	CHASSIS	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SECTION 9
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
  uF: μF
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- COILS
  uH: μH
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA...: μA... , uPA... , μPA... ,
  uPB... , μPB... , uPC... , μPC... ,
  uPD..., μPD...
- Abbreviation
  CND : Canadian model
  AUS : Australian model
  G : German model
  AED : North European model
  EA : Saudi Arabia model
  MY : Malaysia model
  SP : Singapore model
  TH : Thai model
  TW : Taiwan model
  KR : Korea model
  MX : Mexican model
  AR : Argentina model

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remarks	
	1-675-911-11	ADDRESS SENSOR BOARD				
		**********************				
		< IC >				
IC711	8-749-016-76	IC RPI-321				
		< RESISTOR >				
R711	1-247-876-11	CARBON	75K	5%	1/4W	
R712	1-249-409-11	CARBON	220	5%	1/4W	F
R713	1-249-429-11	CARBON	10K	5%	1/4W	
		< SWITCH >				
S711	1-771-821-11	SWITCH, PUSH (1 KEY)(UP DOWN)				
**						
	A-4724-934-A	BD BOARD, COMPLETE				
		*******************				
		< CAPACITOR >				
C101	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C102	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C103	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C104	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C108	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C109	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V	
C110	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V	
C111	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V	
C112	1-107-682-11	CERAMIC CHIP	1uF	10.00%	16V	
C114	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C115	1-104-665-11	ELECT	100uF	20.00%	10V	
C116	1-104-665-11	ELECT	100uF	20.00%	10V	
C117	1-104-665-11	ELECT	100uF	20.00%	10V	
C118	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C119	1-163-235-11	CERAMIC CHIP	22PF	5.00%	50V	
C121	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C122	1-104-665-11	ELECT	100uF	20.00%	10V	
C123	1-163-021-91	CERAMIC CHIP	0.01uF	10.00%	50V	
C124	1-107-823-11	CERAMIC CHIP	0.47uF	10.00%	16V	
C125	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C126	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C127	1-104-665-11	ELECT	100uF	20.00%	10V	
C129	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C130	1-164-346-11	CERAMIC CHIP	1uF		16V	
C131	1-126-964-11	ELECT	10uF	20.00%	50V	
C133	1-164-346-11	CERAMIC CHIP	1uF		16V	
C140	1-164-346-11	CERAMIC CHIP	1uF		16V	
C141	1-164-346-11	CERAMIC CHIP	1uF		16V	
C143	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C145	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C153	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C159	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V	
C162	1-104-665-11	ELECT	100uF	20.00%	10V	
C163	1-104-665-11	ELECT	100uF	20.00%	10V	
C165	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C167	1-163-237-11	CERAMIC CHIP	27PF	5.00%	50V	
C168	1-163-235-11	CERAMIC CHIP	22PF	5.00%	50V	
C171	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C172	1-163-123-00	CERAMIC CHIP	180PF	5%	50V	
C181	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C182	1-163-123-00	CERAMIC CHIP	180PF	5%	50V	
		< CONNECTOR >				
CN101	1-784-741-11	CONNECTOR, FFC 19P				
CN102	1-793-907-11	CONNECTOR, FFC/FPC 16P				
		< FERRITE BEAD >				
FB101	1-500-445-21	FERRITE	0UH			
FB103	1-500-445-21	FERRITE	0UH			
		< IC >				
IC101	8-752-386-85	IC CXD2587Q				
IC102	8-759-549-28	IC BA5974FP-E2				
IC103	8-752-085-51	IC CXA2568M-T6				
		< TRANSISTOR >				
Q101	8-729-049-31	TRANSISTOR	2SB710-RTX			

Ref. No.	Part No.	Description			Remarks
		< RESISTOR >			
R101	1-216-077-91	RES-CHIP	15K	5%	1/10W
R102	1-216-097-91	RES-CHIP	100K	5%	1/10W
R103	1-216-077-91	RES-CHIP	15K	5%	1/10W
R104	1-216-085-00	METAL CHIP	33K	5%	1/10W
R105	1-216-073-00	METAL CHIP	10K	5%	1/10W
R106	1-216-049-91	RES-CHIP	1K	5%	1/10W
R107	1-216-073-00	METAL CHIP	10K	5%	1/10W
R108	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R109	1-216-121-91	RES-CHIP	1M	5%	1/10W
R110	1-216-025-91	RES-CHIP	100	5%	1/10W
R111	1-216-121-91	RES-CHIP	1M	5%	1/10W
R113	1-216-121-91	RES-CHIP	1M	5%	1/10W
R114	1-216-073-00	METAL CHIP	10K	5%	1/10W
R116	1-216-001-00	METAL CHIP	10	5%	1/10W
R117	1-216-049-91	RES-CHIP	1K	5%	1/10W
R118	1-216-025-91	RES-CHIP	100	5%	1/10W
R119	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R123	1-216-073-00	METAL CHIP	10K	5%	1/10W
R124	1-216-097-91	RES-CHIP	100K	5%	1/10W
R131	1-216-033-00	METAL CHIP	220	5%	1/10W
R143	1-216-103-00	METAL CHIP	180K	5%	1/10W
R144	1-216-103-00	METAL CHIP	180K	5%	1/10W
R147	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R148	1-216-001-00	METAL CHIP	10	5%	1/10W
R149	1-216-001-00	METAL CHIP	10	5%	1/10W
R158	1-216-111-00	METAL CHIP	390K	5%	1/10W
R159	1-216-101-00	METAL CHIP	150K	5%	1/10W
R162	1-216-101-00	METAL CHIP	150K	5%	1/10W
R171	1-216-078-00	RES-CHIP	16K	5%	1/10W
R172	1-216-073-00	METAL CHIP	10K	5%	1/10W
R173	1-216-077-91	RES-CHIP	15K	5%	1/10W
R181	1-216-078-00	RES-CHIP	16K	5%	1/10W
R182	1-216-073-00	METAL CHIP	10K	5%	1/10W
R183	1-216-077-91	RES-CHIP	15K	5%	1/10W
		< NETWORK >			
RN101	1-233-576-11	RES, CHIP NETWORK 100			
		< SWITCH >			
S101	1-771-853-11	SWITCH, DETECTION (LIMIT IN)			
		< VIBRATOR >			
X101	1-579-280-11	VIBRATOR, CRYSTAL(16.9344 MHz)			

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Ref. No.	Part No.	Description			Remarks
	1-675-912-11	DRIVER BOARD ************			
		< CAPACITOR >			
C702	1-126-964-51	ELECT	10uF	20.00%	50V
		< CONNECTOR >			
CN701	1-785-336-11	PIN, CONNECTOR(LIGHT ANGLE)10P			
CN702	1-785-550-11	CONNECTOR, FFC/FPC 8P			
		< DIODE >			
D701	8-719-983-63	DIODE	MTZJ-T-72-3.3B		
		< IC >			
IC701	8-759-598-69	IC BA6956AN			
		< RESISTOR >			
R701	1-249-411-11	CARBON	330	5%	1/4W
R702	1-249-401-11	CARBON	47	5%	1/4W F

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Ref. No.	Part No.	Description			Remarks
	1-676-220-11	HEAD(A) BOARD *************			
		< CONNECTOR >			
* CN1	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P			

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Ref. No.	Part No.	Description			Remarks
	1-676-221-11	HEAD(B) BOARD *************			
CN2	1-564-722-11	PIN, CONNECTOR (SMALL TYPE) 6P			

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Ref. No.	Part No.	Description			Remarks
	A-4428-070-A	MAIN BOARD, COMPLETE (AED,AEP,CIS,G,UK) *********************			
	A-4428-084-A	MAIN BOARD, COMPLETE (CND,US) *********************			
	A-4428-090-A	MAIN BOARD, COMPLETE (MY,SP,TW) *********************			
	A-4428-288-A	MAIN BOARD, COMPLETE (EA) *********************			
	A-4428-290-A	MAIN BOARD, COMPLETE (AUS) *********************			
	A-4428-292-A	MAIN BOARD, COMPLETE (E) *********************			
	A-4428-735-A	MAIN BOARD, COMPLETE (AR,MX) *********************			
	A-4428-910-A	MAIN BOARD, COMPLETE (TH) *********************			
	A-4428-958-A	MAIN BOARD, COMPLETE (KR) *********************			
	4-224-796-21	HEATSINK (B)			
	7-685-646-79	SCREW+BVTP	3X8	TYPE2 N-S	
		< CAPACITOR >			
C101	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C102	1-126-961-11	ELECT	2.2uF	20.00%	50V
C103	1-126-964-11	ELECT	10uF	20.00%	50V
C104	1-126-964-11	ELECT	10uF	20.00%	50V
C105	1-126-964-11	ELECT	10uF	20.00%	50V
C106	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C107	1-136-495-11	MYLAR	0.068uF	5.00%	50V
C108	1-136-495-11	MYLAR	0.068uF	5.00%	50V
C109	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C110	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V

MAIN

Ref. No.	Part No.	Description				Remarks
C111	1-163-018-00	CERAMIC CHIP	0.0056uF	5%	50V	
C112	1-126-961-11	ELECT	2.2uF	20.00%	50V	
C113	1-126-961-11	ELECT	2.2uF	20.00%	50V	
C115	1-136-169-00	MYLAR	0.22uF	5.00%	50V	
C116	1-136-169-00	MYLAR	0.22uF	5.00%	50V	
C117	1-126-964-11	ELECT	10uF	20.00%	50V	
C118	1-126-961-11	ELECT	2.2uF	20.00%	50V	
C121	1-126-964-11	ELECT	10uF	20.00%	50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C122	1-126-964-11	ELECT	10uF	20.00%	50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C123	1-126-964-11	ELECT	10uF	20.00%	50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C124	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C125	1-126-964-11	ELECT	10uF	20.00%	50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C131	1-136-164-00	MYLAR	0.082uF	5.00%	50V	
C132	1-126-964-11	ELECT	10uF	20.00%	50V	
C133	1-126-964-11	ELECT	10uF	20.00%	50V	
C134	1-163-033-91	CERAMIC CHIP	0.022uF	50V		
C135	1-126-964-11	ELECT	10uF	20.00%	50V	
C140	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C141	1-126-964-11	ELECT	10uF	20.00%	50V	(EXCEPT TH)
C142	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C144	1-126-964-11	ELECT	10uF	20.00%	50V	
C146	1-126-964-11	ELECT	10uF	20.00%	50V	(TH)
C151	1-163-001-11	CERAMIC CHIP	220PF	10%	50V	
C152	1-126-961-11	ELECT	2.2uF	20.00%	50V	
C153	1-126-964-11	ELECT	10uF	20.00%	50V	
C154	1-126-964-11	ELECT	10uF	20.00%	50V	
C155	1-126-964-11	ELECT	10uF	20.00%	50V	
C156	1-136-165-00	MYLAR	0.1uF	5.00%	50V	
C157	1-136-495-11	MYLAR	0.068uF	5.00%	50V	
C158	1-136-495-11	MYLAR	0.068uF	5.00%	50V	
C159	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V	
C160	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V	
C161	1-163-018-00	CERAMIC CHIP	0.0056uF	5%	50V	
C162	1-126-961-11	ELECT	2.2uF	20.00%	50V	
C165	1-136-169-00	MYLAR	0.22uF	5.00%	50V	
C166	1-136-169-00	MYLAR	0.22uF	5.00%	50V	
C167	1-126-964-11	ELECT	10uF	20.00%	50V	
C171	1-126-964-11	ELECT	10uF	20.00%	50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C172	1-126-964-11	ELECT	10uF	20.00%	50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C175	1-126-964-11	ELECT	10uF	20.00%	50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C199	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C201	1-104-665-11	ELECT	100uF	20.00%	10V	
C202	1-126-935-11	ELECT	470uF	20.00%	6.3V	
C203	1-163-033-91	CERAMIC CHIP	0.022uF	50V		
C204	1-126-961-11	ELECT	2.2uF	20.00%	50V	
C205	1-163-033-91	CERAMIC CHIP	0.022uF	50V		
C206	1-126-961-11	ELECT	2.2uF	20.00%	50V	
C207	1-126-916-11	ELECT	1000uF	20.00%	6.3V	
C208	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C209	1-126-925-11	ELECT	470uF	20.00%	10V	

Ref. No.	Part No.	Description				Remarks
C301	1-126-960-11	ELECT	1uF	20.00%	50V	
C302	1-130-479-00	MYLAR	0.0047uF	5%	50V	
C303	1-136-165-00	MYLAR	0.1uF	5.00%	50V	
C305	1-126-964-11	ELECT	10uF	20.00%	50V	
C306	1-126-960-11	ELECT	1uF	20.00%	50V	
C307	1-126-959-11	ELECT	0.47uF	20.00%	50V	
C308	1-126-964-11	ELECT	10uF	20.00%	50V	
C309	1-137-194-81	MYLAR	0.47uF	5.00%	50V	
C310	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C311	1-126-964-11	ELECT	10uF	20.00%	50V	
C312	1-126-959-11	ELECT	0.47uF	20.00%	50V	
C313	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C314	1-126-964-11	ELECT	10uF	20.00%	50V	
C315	1-126-963-11	ELECT	4.7uF	20.00%	50V	
C316	1-126-933-11	ELECT	100uF	20.00%	16V	
C317	1-104-665-11	ELECT	100uF	20.00%	10V	
C318	1-126-964-11	ELECT	10uF	20.00%	50V	
C319	1-126-961-11	ELECT	2.2uF	20.00%	50V	
C320	1-126-961-11	ELECT	2.2uF	20.00%	50V	
C321	1-163-131-00	CERAMIC CHIP	390PF	5%	50V	
C322	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C323	1-136-157-00	MYLAR	0.022uF	5.00%	50V	
C324	1-126-964-11	ELECT	10uF	20.00%	50V	
C325	1-126-965-11	ELECT	22uF	20.00%	50V	
C326	1-163-131-00	CERAMIC CHIP	390PF	5%	50V	
C327	1-104-665-11	ELECT	100uF	20.00%	10V	
C328	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C329	1-130-483-00	MYLAR	0.01uF	5%	50V	
C330	1-126-964-11	ELECT	10uF	20.00%	50V	
C331	1-126-965-11	ELECT	22uF	20.00%	50V	
C332	1-137-427-11	MYLAR	120PF	5.00%	50V	
C333	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	
C334	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	
C335	1-137-393-11	MYLAR	0.01uF	5.00%	100V	
C336	1-126-961-11	ELECT	2.2uF	20.00%	50V	
C337	1-136-155-00	FILM	0.015uF	5%	50V	
C338	1-130-481-00	MYLAR	0.0068uF	5%	50V	
C339	1-130-481-00	MYLAR	0.0068uF	5%	50V	
C340	1-136-156-00	MYLAR	0.018uF	5.00%	50V	
C341	1-126-960-11	ELECT	1uF	20.00%	50V	
C342	1-104-664-11	ELECT	47uF	20.00%	16V	
C351	1-126-960-11	ELECT	1uF	20.00%	50V	
C352	1-130-479-00	MYLAR	0.0047uF	5%	50V	
C353	1-136-165-00	MYLAR	0.1uF	5.00%	50V	
C355	1-126-964-11	ELECT	10uF	20.00%	50V	
C356	1-126-960-11	ELECT	1uF	20.00%	50V	
C357	1-126-959-11	ELECT	0.47uF	20.00%	50V	
C358	1-126-964-11	ELECT	10uF	20.00%	50V	
C359	1-137-194-81	MYLAR	0.47uF	5.00%	50V	
C360	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C362	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V	
C363	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V	
C368	1-126-964-11	ELECT	10uF	20.00%	50V	
C369	1-126-961-11	ELECT	2.2uF	20.00%	50V	
C370	1-126-961-11	ELECT	2.2uF	20.00%	50V	

Ref. No.	Part No.	Description				Remarks
C371	1-163-131-00	CERAMIC CHIP	390PF	5%	50V	
C372	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C373	1-136-157-00	MYLAR	0.022uF	5.00%	50V	
C374	1-126-964-11	ELECT	10uF	20.00%	50V	
C375	1-126-965-11	ELECT	22uF	20.00%	50V	
C376	1-163-131-00	CERAMIC CHIP	390PF	5%	50V	
C377	1-104-665-11	ELECT	100uF	20.00%	10V	
C378	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C379	1-130-483-00	MYLAR	0.01uF	5%	50V	
C380	1-126-964-11	ELECT	10uF	20.00%	50V	
C381	1-126-965-11	ELECT	22uF	20.00%	50V	
C382	1-137-427-11	MYLAR	120PF	5.00%	50V	
C383	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	
C384	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	
C385	1-126-964-11	ELECT	10uF	20.00%	50V	
C410	1-163-233-11	CERAMIC CHIP	18PF	5.00%	50V	
C411	1-163-231-11	CERAMIC CHIP	15PF	5.00%	50V	
C414	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C462	1-104-665-11	ELECT	100uF	20.00%	10V	
C464	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C497	1-126-964-11	ELECT	10uF	20.00%	50V	
C498	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C501	1-136-165-00	MYLAR	0.1uF	5.00%	50V	
C502	1-136-165-00	MYLAR	0.1uF	5.00%	50V	
C503	1-126-964-11	ELECT	10uF	20.00%	50V	
C504	1-109-953-11	ELECT	2.2uF	20.00%	50V	
C505	1-163-038-91	CERAMIC CHIP	0.1uF		25V	
C601	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C602	1-163-031-11	CERAMIC CHIP	0.01uF		50V	(EXCEPT US,CND)
C603	1-104-664-11	ELECT	47uF	20.00%	16V	
C604	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C605	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C607	1-216-295-91	SHORT	0			(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C607	1-163-031-11	CERAMIC CHIP	0.01uF		50V	(AED,AEP,CIS,CND,G,UK,US)
C611	1-104-664-11	ELECT	47uF	20.00%	16V	
C612	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C613	1-126-960-11	ELECT	1uF	20.00%	50V	
C614	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C615	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C616	1-163-021-91	CERAMIC CHIP	0.01uF	10.00%	50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C616	1-163-023-00	CERAMIC CHIP	0.015uF	5%	50V	(AED,AEP,CIS,CND,G,UK,US)
C617	1-163-021-91	CERAMIC CHIP	0.01uF	10.00%	50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C617	1-163-023-00	CERAMIC CHIP	0.015uF	5%	50V	(AED,AEP,CIS,CND,G,UK,US)
C618	1-126-957-11	ELECT	0.22uF	20.00%	50V	
C619	1-163-075-00	CERAMIC CHIP	0.047uF	50V		
C620	1-126-962-11	ELECT	3.3uF	20.00%	50V	
C621	1-126-962-11	ELECT	3.3uF	20.00%	50V	
C622	1-104-664-11	ELECT	47uF	20.00%	16V	
C623	1-126-964-11	ELECT	10uF	20.00%	50V	
C624	1-126-960-11	ELECT	1uF	20.00%	50V	

Ref. No.	Part No.	Description				Remarks
C625	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	(CND,US,AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C625	1-163-137-00	CERAMIC CHIP	680PF	5%	50V	(AED,AEP,CIS,G,UK)
C626	1-104-760-11	CERAMIC CHIP	0.047uF	10.00%	50V	
C628	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	(CND,US,AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C628	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	(AED,AEP,CIS,G,UK)
C629	1-126-965-11	ELECT	22uF	20.00%	50V	
C630	1-126-964-11	ELECT	10uF	20.00%	50V	
C631	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C632	1-126-933-11	ELECT	100uF	20.00%	16V	
C633	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C634	1-163-016-00	CERAMIC CHIP	0.0039uF	10%	50V	
C635	1-163-016-00	CERAMIC CHIP	0.0039uF	10%	50V	
C636	1-163-021-91	CERAMIC CHIP	0.01uF	10.00%	50V	
C637	1-163-021-91	CERAMIC CHIP	0.01uF	10.00%	50V	
C638	1-163-135-00	CERAMIC CHIP	560PF	5%	50V	(AED,AEP,CIS,G,UK)
C641	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C644	1-163-087-00	CERAMIC CHIP	4PF		50V	
C645	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C647	1-163-105-00	CERAMIC CHIP	33PF	5%	50V	(AED,AEP,CIS,G,UK)
C651	1-163-239-11	CERAMIC CHIP	33PF	5.00%	50V	
C652	1-163-235-11	CERAMIC CHIP	22PF	5.00%	50V	
C653	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C655	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C656	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C657	1-104-664-11	ELECT	47uF	20.00%	16V	
C658	1-126-961-11	ELECT	2.2uF	20.00%	50V	
C659	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C660	1-104-664-11	ELECT	47uF	20.00%	16V	
C661	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C662	1-126-959-11	ELECT	0.47uF	20.00%	50V	
C663	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C669	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
C681	1-126-964-11	ELECT	10uF	20.00%	50V	(AED,AEP,CIS,G,UK)
C682	1-163-135-00	CERAMIC CHIP	560PF	5%	50V	(AED,AEP,CIS,G,UK)
C683	1-163-038-91	CERAMIC CHIP	0.1uF		25V	(AED,AEP,CIS,G,UK)
C684	1-104-664-11	ELECT	47uF	20.00%	16V	(AED,AEP,CIS,G,UK)
C685	1-126-964-11	ELECT	10uF	20.00%	50V	(AED,AEP,CIS,G,UK)
C686	1-126-961-11	ELECT	2.2uF	20.00%	50V	(AED,AEP,CIS,G,UK)
C687	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	(AED,AEP,CIS,G,UK)
C688	1-163-031-11	CERAMIC CHIP	0.01uF		50V	(AED,AEP,CIS,G,UK)

MAIN

Ref. No.	Part No.	Description	Remarks
C689	1-163-135-00	CERAMIC CHIP 560PF 5% 50V	(AED,AEP,CIS,G,UK)
C690	1-126-961-11	ELECT 2.2uF 20.00% 50V	(AED,AEP,CIS,G,UK)
C691	1-163-031-11	CERAMIC CHIP 0.01uF 50V	(AED,AEP,CIS,G,UK)
C692	1-163-245-11	CERAMIC CHIP 56PF 5.00% 50V	(AED,AEP,CIS,G,UK)
C693	1-163-245-11	CERAMIC CHIP 56PF 5.00% 50V	(AED,AEP,CIS,G,UK)
C694	1-163-031-11	CERAMIC CHIP 0.01uF 50V	(AED,AEP,CIS,G,UK)
C695	1-163-031-11	CERAMIC CHIP 0.01uF 50V	(AED,AEP,CIS,G,UK)
C801	1-163-038-91	CERAMIC CHIP 0.1uF 25V	(AED,AEP,CIS,G,UK)
C802	1-163-038-91	CERAMIC CHIP 0.1uF 25V	(AED,AEP,CIS,G,UK)
C803	1-163-031-11	CERAMIC CHIP 0.01uF 50V	
C821	1-104-665-11	ELECT 100uF 20.00% 10V	
C822	1-126-961-11	ELECT 2.2uF 20.00% 50V	
C823	1-126-968-11	ELECT 100uF 20.00% 50V	
C824	1-126-960-11	ELECT 1uF 20.00% 50V	
C841	1-126-959-11	ELECT 0.47uF 20.00% 50V	
C851	1-163-038-91	CERAMIC CHIP 0.1uF 25V	(AED,AEP,CIS,G,UK)
C852	1-163-038-91	CERAMIC CHIP 0.1uF 25V	(AED,AEP,CIS,G,UK)
C853	1-163-031-11	CERAMIC CHIP 0.01uF 50V	
C861	1-107-717-11	ELECT 47uF 20.00% 50V	
C862	1-107-721-11	ELECT 4.7uF 20.00% 100V	
C863	1-107-721-11	ELECT 4.7uF 20.00% 100V	
C891	1-126-964-11	ELECT 10uF 20.00% 50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C892	1-163-038-91	CERAMIC CHIP 0.1uF 25V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C901	1-126-944-11	ELECT 3300uF 20.00% 25V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C901	1-126-936-11	ELECT 3300uF 20.00% 16V	(AED,AEP,CIS,CND,G,UK,US)
C902	1-136-165-00	MYLAR 0.1uF 5.00% 50V	
C903	1-136-165-00	MYLAR 0.1uF 5.00% 50V	
C905	1-136-165-00	MYLAR 0.1uF 5.00% 50V	
C906	1-136-165-00	MYLAR 0.1uF 5.00% 50V	
C907	1-126-937-11	ELECT 4700uF 20.00% 16V	
C908	1-126-942-61	ELECT 1000uF 20.00% 25V	
C909	1-126-952-11	ELECT 1000uF 20.00% 35V	
C911	1-126-960-11	ELECT 1uF 20.00% 50V	
C912	1-126-916-11	ELECT 1000uF 20.00% 6.3V	
C921	1-126-960-11	ELECT 1uF 20.00% 50V	
C922	1-126-933-11	ELECT 100uF 20.00% 16V	
C931	1-126-964-11	ELECT 10uF 20.00% 50V	
C932	1-126-935-11	ELECT 470uF 20.00% 16V	
C951	1-126-960-11	ELECT 1uF 20.00% 50V	
C952	1-104-665-11	ELECT 100uF 20.00% 10V	
C961	1-126-960-11	ELECT 1uF 20.00% 50V	
C962	1-126-926-11	ELECT 1000uF 20.00% 10V	

Ref. No.	Part No.	Description	Remarks
		< FILTER >	
CF601	1-760-023-11	FILTER, CERAMIC	(CND,US,AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
CF601	1-579-185-21	FILTER, CERAMIC (AED,AEP,CIS,G,UK)	
CF602	1-760-023-11	FILTER, CERAMIC	(CND,US,AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
CF602	1-579-185-21	FILTER, CERAMIC (AED,AEP,CIS,G,UK)	
		< CONNECTOR >	
CN202	1-785-336-11	PIN, CONNECTOR(LIGHT ANGLE)10P	
* CN201	1-569-913-11	SOCKET, CONNECTOR 19P	
* CN301	1-568-449-11	HOUSING, CONNECTOR(PC BOARD)3P	
* CN304	1-569-934-11	SOCKET, CONNECTOR 17P	
CN401	1-793-766-11	CONNECTOR, BOARD TO BOARD 30P	
* CN891	1-564-506-11	PLUG, CONNECTOR 3P	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
CN901	1-778-982-11	CONNECTOR, BOARD TO BOARD 13P	
CN902	1-778-982-11	CONNECTOR, BOARD TO BOARD 13P	
		< DIODE >	
D501	8-719-988-61	DIODE 1SS355TE-17	
D502	8-719-988-61	DIODE 1SS355TE-17	
D503	8-719-988-61	DIODE 1SS355TE-17	
D504	8-719-988-61	DIODE 1SS355TE-17	
D505	8-719-988-61	DIODE 1SS355TE-17	
D506	8-719-988-61	DIODE 1SS355TE-17	
D508	8-719-988-61	DIODE 1SS355TE-17	
D509	8-719-988-61	DIODE 1SS355TE-17	
D510	8-719-988-61	DIODE 1SS355TE-17	
D511	8-719-988-61	DIODE 1SS355TE-17	
D601	8-719-056-83	DIODE UDZ-TE-17-6.8B	
D641	8-719-914-42	DIODE DA204K-T-146	
D651	8-719-988-61	DIODE 1SS355TE-17	
D681	8-719-988-61	DIODE 1SS355TE-17 (AED,AEP,CIS,G,UK)	
D801	8-719-988-61	DIODE 1SS355TE-17	
D822	8-719-988-61	DIODE 1SS355TE-17	
D841	8-719-988-61	DIODE 1SS355TE-17	
D861	8-719-988-61	DIODE 1SS355TE-17	
D891	8-719-988-61	DIODE 1SS355TE-17	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
D892	8-719-988-61	DIODE 1SS355TE-17	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
D901	8-719-200-82	DIODE 11ES2-TB5	
D902	8-719-200-82	DIODE 11ES2-TB5	
D903	8-719-200-82	DIODE 11ES2-TB5	
D904	8-719-200-82	DIODE 11ES2-TB5	
D906	8-719-200-82	DIODE 11ES2-TB5	
D907	8-719-200-82	DIODE 11ES2-TB5	
D908	8-719-200-82	DIODE 11ES2-TB5	
D909	8-719-200-82	DIODE 11ES2-TB5	
D910	8-719-200-82	DIODE 11ES2-TB5	
D911	8-719-200-82	DIODE 11ES2-TB5	
D952	8-719-988-61	DIODE 1SS355TE-17	
D953	8-719-988-61	DIODE 1SS355TE-17	
D957	8-719-988-61	DIODE 1SS355TE-17 (TH)	

Ref. No.	Part No.	Description	Remarks
		< FERRITE BEAD >	
FB201	1-216-295-91	SHORT 0	
FB202	1-216-295-91	SHORT 0	
FB203	1-216-295-91	SHORT 0	
FB204	1-216-295-91	SHORT 0	
FB416	1-216-295-91	SHORT 0	
FB462	1-216-295-91	SHORT 0	
FB499	1-216-295-91	SHORT 0	
		< FRONT END >	
FE601	1-693-477-11	FRONT END (3 GANGS) (AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)	
FE602	1-693-478-11	FRONT END (FM3 GANGS)(CND,US)	
FE603	1-693-496-11	FRONT END (4 GANG) (AED,AEP,CIS,G,UK)	
		< IC >	
IC104	8-759-099-06	IC M5218AFP-TE1 (AR,AUS,E,EA,KR,MX,TH)	
IC101	8-759-652-04	IC M61504FP-TP	
IC102	8-759-099-06	IC M5218AFP-TE1	
IC201	8-749-923-04	IC TOTX178A (OPTICAL)	
IC302	8-759-143-54	IC uPC1330HA	
IC303	8-759-656-83	IC NJM4580MD-TE	
IC304	8-759-656-83	IC NJM4580MD-TE	
IC301	8-759-652-80	IC HA12227F	
IC401	8-759-652-48	IC M30622MAA-A25FP	
IC501	8-759-635-63	IC M51943BSL-TP	
IC601	8-759-652-00	IC BA1450	
IC651	8-759-288-54	IC LC72130	
IC681	8-759-099-06	IC M5218AFP-TE1 (AED,AEP,CIS,G,UK)	
IC682	8-759-541-48	IC BU1924 (AED,AEP,CIS,G,UK)	
IC911	8-759-039-69	IC uPC7805AHF	
IC921	8-759-088-08	IC uPC7812AHF	
IC931	8-759-604-86	IC M5F7807L	
IC951	8-759-158-62	IC TA78057S	
IC961	8-759-701-59	IC M5F7809L	
		< IFT >	
IFT601	1-435-295-11	TRANSFORMER, IF	
		< JACK >	
J101	1-793-987-11	JACK, PIN 2P (MD VIDEO)	
		< JUMPER RESISTOR >	
JR1	1-216-296-91	SHORT 0	
JR2	1-216-296-91	SHORT 0	
JR3	1-216-296-91	SHORT 0	
JR4	1-216-296-91	SHORT 0	
JR6	1-216-296-91	SHORT 0	
JR7	1-216-296-91	SHORT 0	
JR8	1-216-295-91	SHORT 0	
JR9	1-216-296-91	SHORT 0	
JR10	1-216-296-91	SHORT 0	
JR11	1-216-296-91	SHORT 0	
JR12	1-216-296-91	SHORT 0	
JR13	1-216-296-91	SHORT 0	
JR14	1-216-296-91	SHORT 0	
JR15	1-216-296-91	SHORT 0	
JR16	1-216-295-91	SHORT 0	
JR17	1-216-296-91	SHORT 0	
JR18	1-216-295-91	SHORT 0	
JR19	1-216-296-91	SHORT 0	
JR21	1-216-295-91	SHORT 0	
JR22	1-216-296-91	SHORT 0	
JR23	1-216-296-91	SHORT 0	
JR24	1-216-296-91	SHORT 0	
JR25	1-216-296-91	SHORT 0	
JR26	1-216-296-91	SHORT 0	
JR27	1-216-296-91	SHORT 0	
JR28	1-216-295-91	SHORT 0	
JR29	1-216-296-91	SHORT 0	
JR30	1-216-296-91	SHORT 0 (TH)	
JR31	1-216-296-91	SHORT 0 (TH)	
JR32	1-216-296-91	SHORT 0 (TH)	
JR33	1-216-296-91	SHORT 0 (TH)	
JR34	1-216-295-91	SHORT 0 (TH)	
JR35	1-216-296-91	SHORT 0 (TH)	
JR36	1-216-295-91	SHORT 0 (TH)	
JR37	1-216-296-91	SHORT 0 (TH)	
JR38	1-216-296-91	SHORT 0 (TH)	
JR39	1-216-296-91	SHORT 0 (TH)	
JR41	1-216-296-91	SHORT 0 (TH)	
JR42	1-216-295-91	SHORT 0 (TH)	
JR43	1-216-296-91	SHORT 0 (TH)	
JR44	1-216-296-91	SHORT 0 (TH)	
JR45	1-216-296-91	SHORT 0 (TH)	
JR50	1-216-296-91	SHORT 0 (AED,AEP,CIS,CND,G,UK,US)	
JR51	1-216-296-91	SHORT 0 (TH)	
JR609	1-216-295-91	SHORT 0(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)	
JR601	1-216-296-91	SHORT 0 (EXCEPT US,CND)	
JR602	1-216-295-91	SHORT 0	
JR603	1-216-296-91	SHORT 0	
JR604	1-216-296-91	SHORT 0	
JR605	1-216-296-91	SHORT 0	
JR606	1-216-296-91	SHORT 0	
JR607	1-216-295-91	SHORT 0	
JR608	1-216-296-91	SHORT 0	
JR612	1-216-295-91	SHORT 0 (CND,US)	
JR611	1-216-296-91	SHORT 0	
JR614	1-216-295-91	SHORT 0 (AED,AEP,CIS,G,UK)	
JR615	1-216-295-91	SHORT 0	
JR616	1-216-295-91	SHORT 0	
JR619	1-216-295-91	SHORT 0	
JR632	1-216-295-91	SHORT 0 (CND,US)	
JR634	1-216-295-91	SHORT 0	
JR636	1-216-295-91	SHORT 0 (AED,AEP,CIS,G,UK)	
JR640	1-216-295-91	SHORT 0 (CND,US,AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)	
JR641	1-216-295-91	SHORT 0 (AED,AEP,CIS,G,UK)	
JR907	1-216-295-91	SHORT 0 (AED,AEP,CIS,CND,G,UK,US)	

MAIN

Ref. No.	Part No.	Description			Remarks
JR910	1-216-295-91	SHORT	0 (AED,AEP,CIS,CND,G,UK,US)		
JR928	1-216-295-91	SHORT	0 (AR,AUS,E,EA,KR,MX,MY,SP,TW)		
JR923	1-216-295-91	SHORT	0		
JR924	1-216-295-91	SHORT	0		
		< COIL >			
L201	1-414-189-31	INDUCTOR	100uH		
L301	1-410-780-11	INDUCTOR	27MH		
L302	1-414-193-41	INDUCTOR	220uH		
L303	1-414-193-41	INDUCTOR	220uH		
L351	1-410-780-11	INDUCTOR	27MH		
L641	1-408-765-21	INDUCTOR CHIP	1uH (AED,AEP,CIS,G,UK)		
L642	1-216-296-91	SHORT	0 (CND,US,AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)		
L642	1-408-783-00	INDUCTOR CHIP	33uH (AED,AEP,CIS,G,UK)		
L681	1-408-789-21	INDUCTOR CHIP	100uH (AED,AEP,CIS,G,UK)		
L801	1-420-872-00	COIL, AIR-CORE (AED,AEP,CIS,G,UK)			
L851	1-420-872-00	COIL, AIR-CORE (AED,AEP,CIS,G,UK)			
		< FILTER >			
LPF601	1-234-458-11	FILTER, LOW PASS			
LPF602	1-234-458-11	FILTER, LOW PASS			
		< TRANSISTOR >			
Q101	8-729-120-28	TRANSISTOR	2SC1623-T1-L5L6		
Q102	8-729-144-85	TRANSISTOR	2SK1133-T1B		
Q103	8-729-107-46	TRANSISTOR	2SC3624A-T1L15L16		
Q104	8-729-120-28	TRANSISTOR	2SC1623-T1-L5L6		
Q141	8-729-120-28	TRANSISTOR	2SC1623-T1-L5L6		
Q151	8-729-120-28	TRANSISTOR	2SC1623-T1-L5L6		
Q152	8-729-144-85	TRANSISTOR	2SK1133-T1B		
Q153	8-729-107-46	TRANSISTOR	2SC3624A-T1L15L16		
Q154	8-729-120-28	TRANSISTOR	2SC1623-T1-L5L6		
Q301	8-729-801-93	TRANSISTOR	2SD1387-34-TP		
Q302	8-729-142-46	TRANSISTOR	2SC2001TP-LK		
Q303	8-729-142-46	TRANSISTOR	2SC2001TP-LK		
Q304	8-729-113-78	TRANSISTOR	FN1F4N-T1M35		
Q305	8-729-113-13	TRANSISTOR	FA1A4M-T1L33		
Q391	8-729-140-04	TRANSISTOR	2SB1116-TP-LK		
Q392	8-729-113-13	TRANSISTOR	FA1A4M-T1L33		
Q393	8-729-140-04	TRANSISTOR	2SB1116-TP-LK		
Q394	8-729-113-13	TRANSISTOR	FA1A4M-T1L33		
Q395	8-729-113-13	TRANSISTOR	FA1A4M-T1L33		
Q396	8-729-116-57	TRANSISTOR	2SB1068TP-K		
Q397	8-729-113-13	TRANSISTOR	FA1A4M-T1L33		
Q501	8-729-120-28	TRANSISTOR	2SC1623-T1-L5L6		
Q503	8-729-113-13	TRANSISTOR	FA1A4M-T1L33		
Q504	8-729-113-78	TRANSISTOR	FN1F4N-T1M35		
Q505	8-729-113-13	TRANSISTOR	FA1A4M-T1L33		
Q506	8-729-113-13	TRANSISTOR	FA1A4M-T1L33		
Q601	8-729-201-27	TRANSISTOR	2SC2715Y-TE85L		
Q602	8-729-422-57	TRANSISTOR	BN1A4M-TP		
Q611	8-729-120-28	TRANSISTOR	2SC2412K-T-146-QR		
Q612	8-729-120-28	TRANSISTOR	2SC2412K-T-146-QR		
Q821	8-729-120-28	TRANSISTOR	2SC1623-T1-L5L6		
Q822	8-729-120-28	TRANSISTOR	2SC1623-T1-L5L6		
Q823	8-729-216-22	TRANSISTOR	2SA812-T1-M5M6		
Q824	8-729-113-13	TRANSISTOR	FA1A4M-T1L33		
Q825	8-729-120-28	TRANSISTOR	2SC1623-T1-L5L6		
Q828	8-729-120-28	TRANSISTOR	2SC1623-T1-L5L6		
Q829	8-729-120-28	TRANSISTOR	2SC1623-T1-L5L6		
Q861	8-729-113-78	TRANSISTOR	FN1F4N-T1M35		
Q862	8-729-107-46	TRANSISTOR	2SC3624A-T1L15L16		
Q863	8-729-107-46	TRANSISTOR	2SC3624A-T1L15L16		
Q891	8-729-140-04	TRANSISTOR	2SB1116-TP-LK		(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
Q892	8-729-620-05	TRANSISTOR	2SC2603TP-EF		(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
Q911	8-729-049-79	TRANSISTOR	RT1P137S-TP		
Q912	8-729-113-13	TRANSISTOR	FA1A4M-T1L33		
		< RESISTOR >			
R101	1-216-049-91	RES-CHIP	1K	5%	1/10W
R103	1-216-073-00	METAL CHIP	10K	5%	1/10W
R104	1-216-073-00	METAL CHIP	10K	5%	1/10W
R105	1-216-097-91	RES-CHIP	100K	5%	1/10W (TH)
R107	1-216-105-91	RES-CHIP	220K	5%	1/10W
R108	1-216-097-91	RES-CHIP	100K	5%	1/10W
R109	1-216-073-00	METAL CHIP	10K	5%	1/10W
R110	1-216-045-00	METAL CHIP	680	5%	1/10W
R111	1-216-073-00	METAL CHIP	10K	5%	1/10W
R112	1-216-089-91	RES-CHIP	47K	5%	1/10W
R113	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R114	1-216-097-91	RES-CHIP	100K	5%	1/10W
R115	1-216-073-00	METAL CHIP	10K	5%	1/10W
R116	1-216-049-91	RES-CHIP	1K	5%	1/10W
R118	1-216-073-00	METAL CHIP	10K	5%	1/10W
R119	1-216-103-00	METAL CHIP	180K	5%	1/10W
R121	1-216-296-91	SHORT	0 (TH)		
R121	1-216-222-00	RES-CHIP	10K	5%	1/8W (AR,AUS,E,EA,KR,MX,MY,SP,TW)
R122	1-216-073-00	METAL CHIP	10K	5%	1/10W (AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R123	1-216-073-00	METAL CHIP	10K	5%	1/10W (AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R124	1-216-065-91	RES-CHIP	4.7K	5%	1/10W (AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R125	1-216-073-00	METAL CHIP	10K	5%	1/10W
R132	1-216-025-91	RES-CHIP	100	5%	1/10W
R133	1-216-025-91	RES-CHIP	100	5%	1/10W
R134	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R141	1-216-049-91	RES-CHIP	1K	5%	1/10W
R142	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R143	1-216-089-91	RES-CHIP	47K	5%	1/10W
R144	1-216-295-91	SHORT	0		
R145	1-216-041-00	METAL CHIP	470	5%	1/10W
R146	1-216-041-00	METAL CHIP	470	5%	1/10W
R147	1-216-041-00	METAL CHIP	470	5%	1/10W
R151	1-216-049-91	RES-CHIP	1K	5%	1/10W
R153	1-216-073-00	METAL CHIP	10K	5%	1/10W
R154	1-216-073-00	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description				Remarks
R155	1-216-097-91	RES-CHIP	100K	5%	1/10W	(TH)
R157	1-216-105-91	RES-CHIP	220K	5%	1/10W	
R158	1-216-097-91	RES-CHIP	100K	5%	1/10W	
R159	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R160	1-216-045-00	METAL CHIP	680	5%	1/10W	
R161	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R162	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R163	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R164	1-216-097-91	RES-CHIP	100K	5%	1/10W	
R165	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R166	1-216-049-91	RES-CHIP	1K	5%	1/10W	
R168	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R169	1-216-103-00	METAL CHIP	180K	5%	1/10W	
R171	1-216-073-00	METAL CHIP	10K	5%	1/10W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R172	1-216-073-00	METAL CHIP	10K	5%	1/10W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R173	1-216-073-00	METAL CHIP	10K	5%	1/10W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R175	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R201	1-216-025-91	RES-CHIP	100	5%	1/10W	
R202	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R203	1-216-025-91	RES-CHIP	100	5%	1/10W	
R204	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R301	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R302	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R303	1-216-025-91	RES-CHIP	100	5%	1/10W	
R304	1-216-025-91	RES-CHIP	100	5%	1/10W	
R305	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R306	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R307	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	
R308	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R309	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R311	1-216-121-91	RES-CHIP	1M	5%	1/10W	
R312	1-216-102-00	RES-CHIP	160K	5%	1/10W	
R313	1-216-097-91	RES-CHIP	100K	5%	1/10W	
R315	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R316	1-216-235-00	RES-CHIP	36K	5%	1/8W	(TH)
R316	1-216-228-00	RES-CHIP	18K	5%	1/8W	(EXCEPT TH)
R317	1-216-222-00	RES-CHIP	10K	5%	1/8W	
R318	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R319	1-216-111-00	METAL CHIP	390K	5%	1/10W	
R320	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R321	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R331	1-216-099-00	METAL CHIP	120K	5%	1/10W	
R332	1-216-025-91	RES-CHIP	100	5%	1/10W	
R333	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	
R334	1-216-100-00	RES-CHIP	130K	5%	1/10W	
R335	1-216-033-00	METAL CHIP	220	5%	1/10W	
R336	1-216-099-00	METAL CHIP	120K	5%	1/10W	
R337	1-216-033-00	METAL CHIP	220	5%	1/10W	
R338	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R339	1-216-075-00	METAL CHIP	12K	5%	1/10W	

Ref. No.	Part No.	Description				Remarks
R340	1-216-107-00	METAL CHIP	270K	5%	1/10W	
R341	1-216-033-00	METAL CHIP	220	5%	1/10W	
R342	1-216-075-00	METAL CHIP	12K	5%	1/10W	
R343	1-219-787-17	FUSIBLE	5.6	5%	1/4W	
R344	1-219-787-17	FUSIBLE	5.6	5%	1/4W	
R345	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R346	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R347	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R351	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R352	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R353	1-216-025-91	RES-CHIP	100	5%	1/10W	
R354	1-216-025-91	RES-CHIP	100	5%	1/10W	
R355	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R356	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R357	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	
R358	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	
R359	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R360	1-216-045-00	METAL CHIP	680	5%	1/10W	
R361	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R363	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R364	1-216-045-00	METAL CHIP	680	5%	1/10W	
R366	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R367	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R368	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R369	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R371	1-216-238-91	RES-CHIP	47K	5%	1/8W	
R372	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	
R373	1-216-049-91	RES-CHIP	1K	5%	1/10W	
R374	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R375	1-216-094-00	RES-CHIP	75K	5%	1/10W	
R376	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	
R377	1-216-089-91	RES-CHIP	47K	5%	1/10W	
R378	1-216-094-00	RES-CHIP	75K	5%	1/10W	
R381	1-216-099-00	METAL CHIP	120K	5%	1/10W	
R382	1-216-025-91	RES-CHIP	100	5%	1/10W	
R383	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	
R384	1-216-100-00	RES-CHIP	130K	5%	1/10W	
R385	1-216-296-91	SHORT 0				
R386	1-216-099-00	METAL CHIP	120K	5%	1/10W	
R387	1-216-033-00	METAL CHIP	220	5%	1/10W	
R388	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R389	1-216-075-00	METAL CHIP	12K	5%	1/10W	
R390	1-216-107-00	METAL CHIP	270K	5%	1/10W	
R391	1-216-296-91	SHORT 0				
R392	1-216-075-00	METAL CHIP	12K	5%	1/10W	
R393	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R394	1-216-033-00	METAL CHIP	220	5%	1/10W	
R396	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	
R407	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	
R409	1-216-295-91	SHORT 0				
R411	1-216-109-00	METAL CHIP	330K	5%	1/10W	
R413	1-216-295-91	SHORT 0				
R417	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R418	1-216-025-91	RES-CHIP	100	5%	1/10W	
R419	1-216-025-91	RES-CHIP	100	5%	1/10W	

MAIN

Ref. No.	Part No.	Description			Remarks
R429	1-216-025-91	RES-CHIP	100	5%	1/10W
R430	1-216-025-91	RES-CHIP	100	5%	1/10W
R432	1-216-025-91	RES-CHIP	100	5%	1/10W
R433	1-216-025-91	RES-CHIP	100	5%	1/10W
R435	1-216-033-00	METAL CHIP	220	5%	1/10W
R437	1-216-033-00	METAL CHIP	220	5%	1/10W
R440	1-216-295-91	SHORT	0		
R441	1-216-295-91	SHORT	0		
R442	1-216-295-91	SHORT	0		
R443	1-216-295-91	SHORT	0 (EXCEPT EA,MX)		
R444	1-216-295-91	SHORT	0 (EXCEPT EA,MX)		
R445	1-216-295-91	SHORT	0 (EXCEPT EA,MX)		
R446	1-216-295-91	SHORT	0 (EXCEPT EA,MX)		
R447	1-216-295-91	SHORT	0 (EXCEPT EA,MX)		
R448	1-216-295-91	SHORT	0 (EXCEPT EA,MX)		
R449	1-216-295-91	SHORT	0 (EXCEPT EA,MX)		
R467	1-216-295-91	SHORT	0 (EXCEPT EA,MX)		
R468	1-216-295-91	SHORT	0 (EXCEPT EA,MX)		
R469	1-216-295-91	SHORT	0 (EXCEPT EA,MX)		
R481	1-216-025-91	RES-CHIP	100	5%	1/10W (AED,AEP,CIS,CND,G,UK,US)
R483	1-216-073-00	METAL CHIP	10K	5%	1/10W
R484	1-216-073-00	METAL CHIP	10K	5%	1/10W
R490	1-216-174-00	RES-CHIP	100	5%	1/8W
R491	1-216-174-00	RES-CHIP	100	5%	1/8W
R493	1-216-174-00	RES-CHIP	100	5%	1/8W
R494	1-216-295-91	SHORT	0		
R495	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R496	1-216-089-91	RES-CHIP	47K	5%	1/10W
R497	1-216-295-91	SHORT	0 (MY,SP,TW)		
R497	1-216-073-00	METAL CHIP	10K	5%	1/10W (EA)
R497	1-216-053-00	METAL CHIP	1.5K	5%	1/10W (AUS,KR,TH)
R497	1-216-081-00	METAL CHIP	22K	5%	1/10W (AR,E,MX)
R497	1-216-089-91	RES-CHIP	47K	5%	1/10W (AED,AEP,CIS,CND,G,UK,US)
R498	1-216-089-91	RES-CHIP	47K	5%	1/10W (AR,AUS,E,EA,KR,MX,TH)
R498	1-216-073-00	METAL CHIP	10K	5%	1/10W (CND,US)
R498	1-216-085-00	METAL CHIP	33K	5%	1/10W (AED,AEP,CIS,G,UK)
R499	1-216-025-91	RES-CHIP	100	5%	1/10W
R501	1-216-073-00	METAL CHIP	10K	5%	1/10W
R502	1-216-089-91	RES-CHIP	47K	5%	1/10W
R503	1-216-089-91	RES-CHIP	47K	5%	1/10W
R504	1-216-025-91	RES-CHIP	100	5%	1/10W
R505	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R506	1-216-041-00	METAL CHIP	470	5%	1/10W
R508	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R509	1-216-081-00	METAL CHIP	22K	5%	1/10W
R510	1-216-097-91	RES-CHIP	100K	5%	1/10W
R523	1-216-073-00	METAL CHIP	10K	5%	1/10W
R524	1-216-073-00	METAL CHIP	10K	5%	1/10W
R546	1-216-073-00	METAL CHIP	10K	5%	1/10W
R547	1-216-073-00	METAL CHIP	10K	5%	1/10W
R548	1-216-073-00	METAL CHIP	10K	5%	1/10W
R566	1-216-073-00	METAL CHIP	10K	5%	1/10W
R601	1-216-295-91	SHORT	0 (EXCEPT US,CND)		
R602	1-216-029-00	METAL CHIP	150	5%	1/10W
R603	1-216-037-00	METAL CHIP	330	5%	1/10W (AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R603	1-216-045-00	METAL CHIP	680	5%	1/10W (AED,AEP,CIS,CND,G,UK,US)
R604	1-216-017-91	RES-CHIP	47	5%	1/10W
R605	1-216-045-00	METAL CHIP	680	5%	1/10W
R606	1-216-037-00	METAL CHIP	330	5%	1/10W
R607	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R608	1-216-017-91	RES-CHIP	47	5%	1/10W
R609	1-216-295-91	SHORT	0 (CND,US)		
R610	1-216-045-00	METAL CHIP	680	5%	1/10W
R611	1-216-182-00	RES-CHIP	220	5%	1/8W
R612	1-216-214-00	RES-CHIP	4.7K	5%	1/8W
R613	1-216-206-00	RES-CHIP	2.2K	5%	1/8W
R614	1-216-041-00	METAL CHIP	470	5%	1/10W (E)
R614	1-216-039-00	METAL CHIP	390	5%	1/10W (CND,US,AR,AUS,EA,KR,MX,MY,SP,TH,TW)
R614	1-216-035-00	METAL CHIP	270	5%	1/10W (AED,AEP,CIS,G,UK)
R615	1-216-049-91	RES-CHIP	1K	5%	1/10W
R616	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R617	1-216-041-00	METAL CHIP	470	5%	1/10W (E)
R617	1-216-039-00	METAL CHIP	390	5%	1/10W (CND,US,AR,AUS,EA,KR,MX,MY,SP,TH,TW)
R617	1-216-035-00	METAL CHIP	270	5%	1/10W (AED,AEP,CIS,G,UK)
R618	1-216-049-91	RES-CHIP	1K	5%	1/10W
R619	1-216-025-91	RES-CHIP	100	5%	1/10W
R620	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R621	1-216-075-00	METAL CHIP	12K	5%	1/10W
R622	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R623	1-216-073-00	METAL CHIP	10K	5%	1/10W
R624	1-216-073-00	METAL CHIP	10K	5%	1/10W
R625	1-216-073-00	METAL CHIP	10K	5%	1/10W
R641	1-216-097-91	RES-CHIP	100K	5%	1/10W
R642	1-216-073-00	METAL CHIP	10K	5%	1/10W
R655	1-216-073-00	METAL CHIP	10K	5%	1/10W
R656	1-216-222-00	RES-CHIP	10K	5%	1/8W
R658	1-216-174-00	RES-CHIP	100	5%	1/8W
R659	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R660	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R661	1-216-025-91	RES-CHIP	100	5%	1/10W
R662	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R663	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R664	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R665	1-216-025-91	RES-CHIP	100	5%	1/10W
R666	1-216-073-00	METAL CHIP	10K	5%	1/10W
R667	1-216-222-00	RES-CHIP	10K	5%	1/8W
R668	1-216-049-91	RES-CHIP	1K	5%	1/10W
R669	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R681	1-216-025-91	RES-CHIP	100	5%	1/10W (AED,AEP,CIS,G,UK)
R682	1-216-073-00	METAL CHIP	10K	5%	1/10W (AED,AEP,CIS,G,UK)

Ref. No.	Part No.	Description	Remarks
R683	1-216-097-91	RES-CHIP 100K 5% 1/10W	(AED,AEP,CIS,G,UK)
R684	1-216-097-91	RES-CHIP 100K 5% 1/10W	(AED,AEP,CIS,G,UK)
R685	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	(AED,AEP,CIS,G,UK)
R686	1-216-166-00	RES-CHIP 47 5% 1/8W	(AED,AEP,CIS,G,UK)
R688	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	(AED,AEP,CIS,G,UK)
R689	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	(AED,AEP,CIS,G,UK)
R801	1-260-304-51	CARBON 10 5% 1/2W	(AED,AEP,CIS,G,UK)
R802	1-260-304-51	CARBON 10 5% 1/2W	(AED,AEP,CIS,G,UK)
R804	1-216-089-91	RES-CHIP 47K 5% 1/10W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R821	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R822	1-216-091-00	METAL CHIP 56K 5% 1/10W	
R823	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R824	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R825	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R826	1-216-085-00	METAL CHIP 33K 5% 1/10W	
R827	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R829	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R831	1-216-067-00	METAL CHIP 5.6K 5% 1/10W	
R841	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R842	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R843	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	
R844	1-216-097-91	RES-CHIP 100K 5% 1/10W	
R845	1-216-121-91	RES-CHIP 1M 5% 1/10W	
R851	1-260-304-51	CARBON 10 5% 1/2W	(AED,AEP,CIS,G,UK)
R852	1-260-304-51	CARBON 10 5% 1/2W	(AED,AEP,CIS,G,UK)
R854	1-216-089-91	RES-CHIP 47K 5% 1/10W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R861	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R862	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R863	1-216-089-91	RES-CHIP 47K 5% 1/10W	
R864	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R865	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R866	1-216-019-00	METAL CHIP 56 5% 1/10W	
R868	1-215-891-11	METAL OXIDE 680 5% 2W	
R869	1-215-891-11	METAL OXIDE 680 5% 2W	
R891	1-216-296-91	SHORT 0 (TH)	
R891	1-216-222-00	RES-CHIP 10K 5% 1/8W	(AR,AUS,E,EA,KR,MX,MY,SP,TW)
R892	1-216-065-91	RES-CHIP 4.7K 5% 1/10W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R893	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R912	1-216-222-00	RES-CHIP 10K 5% 1/8W	
⚠R916	1-219-120-51	FUSIBLE 0.15 5% 1/4W	
R923	1-216-295-91	SHORT 0 (TH)	
R924	1-216-295-91	SHORT 0 (TH)	
R928	1-216-295-91	SHORT 0 (TH)	
R966	1-216-019-00	METAL CHIP 56 5% 1/10W	

Ref. No.	Part No.	Description	Remarks
		< COMPOSITION CIRCUIT BLOCK >	
RB641	1-234-457-11	ENCAPSULATED COMPONENT	
		< VARIABLE RESISTOR >	
RV301	1-241-764-11	RES, ADJ, CARBON 10K	
RV302	1-241-762-11	RES, ADJ, CARBON 2.2K	
RV303	1-241-762-11	RES, ADJ, CARBON 2.2K	
RV304	1-241-768-11	RES, ADJ, CARBON 220K	
RV351	1-241-764-11	RES, ADJ, CARBON 10K	
RV352	1-241-762-11	RES, ADJ, CARBON 2.2K	
RV353	1-241-762-11	RES, ADJ, CARBON 2.2K	
RV354	1-241-768-11	RES, ADJ, CARBON 220K	
RV611	1-238-601-11	RES, ADJ, CARBON 22K	
		< RELAY >	
RY801	1-755-373-11	RELAY (EXCEPT MY,SP,TW)	
		< TRANSFORMER >	
T301	1-423-980-11	TRANSFORMER, BIAS OSCILLATION	
T601	1-435-195-11	TRANSFORMER, DISCRIMINATOR	
T602	1-234-477-11	ENCAPSULATED COMPONENT	(AED,AEP,CIS,G,UK)
		< TERMINAL >	
TM601	1-694-555-11	TERMINAL BOARD (4P) (FM/AM)	(CND,US,AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
TM601	1-694-556-21	TERMINAL BOARD (ANT.PAL) (FM/AM)	(AED,AEP,CIS,G,UK)
TM801	1-694-635-11	TERMINAL BOARD (4P) (SPEAKER)	
		< VIBRATOR >	
X401	1-567-098-41	VIBRATOR, CRYSTAL 32.768KHz	
X402	1-781-107-21	VIBRATOR, SERAMIC 16MHz	
X651	1-760-549-31	VIBRATOR, CRYSTAL 4.5MHz	
		< VIBRATOR >	
XT681	1-579-900-21	VIBRATOR, CRYSTAL (AED,AEP,CIS,G,UK)	

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Ref. No.	Part No.	Description	Remarks
	1-675-910-11	MOTOR BOARD ************	
		< CAPACITOR >	
C721	1-162-306-11	CERAMIC 0.01uF 30.00% 16V	
		< CONNECTOR >	
CN721	1-770-516-31	CONNECTOR, FFC 8P	
CN722	1-785-330-11	PIN, CONNECTOR (LIGHT ANGLE)4P	
		< SWITCH >	
S701	1-771-822-11	SWITCH, LEVER (SLIDE)	

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The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

PANEL

Ref. No.	Part No.	Description	Remarks
	A-4428-075-A	PANEL BOARD, COMPLETE	(AED,AEP,CIS,CND,G,UK,US)
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	A-4428-092-A	PANEL BOARD, COMPLETE	(AR,AUS,E,KR,MX,MY,SP,TW)
		**********************	
	A-4428-286-A	PANEL BOARD, COMPLETE (EA)	
		**********************	
	A-4428-907-A	PANEL BOARD, COMPLETE (TH)	
		**********************	
	4-224-584-01	HOLDER(FL)	
		< CAPACITOR >	
C601	1-124-589-11	ELECT 47uF 20% 16V	
C602	1-126-163-11	ELECT 4.7uF 20% 50V	
C603	1-162-306-11	CERAMIC 0.01uF 30.00% 16V	
C604	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C605	1-162-306-11	CERAMIC 0.01uF 30.00% 16V	
C606	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C607	1-104-664-11	ELECT 47uF 20.00% 10V	
C608	1-162-306-11	CERAMIC 0.01uF 30.00% 16V	
C609	1-162-306-11	CERAMIC 0.01uF 30.00% 16V	
C610	1-126-157-11	ELECT 10uF 20% 16V	
C611	1-126-157-11	ELECT 10uF 20% 16V	
C612	1-162-303-11	CERAMIC 0.0033uF 30.00% 16V	
C613	1-126-157-11	ELECT 10uF 20% 16V	
C614	1-126-157-11	ELECT 10uF 20% 16V	
C615	1-126-963-11	ELECT 4.7uF 20.00% 50V	
C616	1-162-306-11	CERAMIC 0.01uF 30.00% 16V	
C620	1-126-933-11	ELECT 100uF 20.00% 16V	
C621	1-104-664-11	ELECT 47uF 20.00% 16V	
C631	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C632	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C633	1-164-159-21	CERAMIC 0.1uF 50V	(TH)
C651	1-164-159-11	CERAMIC 0.1uF 50V	
C652	1-126-960-11	ELECT 1uF 20.00% 50V	
C653	1-126-960-11	ELECT 1uF 20.00% 50V	
C654	1-164-159-11	CERAMIC 0.1uF 50V	
C655	1-162-282-31	CERAMIC 100PF 10% 50V	
C656	1-162-282-31	CERAMIC 100PF 10% 50V	
C657	1-162-282-31	CERAMIC 100PF 10% 50V	
C658	1-162-282-31	CERAMIC 100PF 10% 50V	
C659	1-162-282-31	CERAMIC 100PF 10% 50V	
C660	1-162-282-31	CERAMIC 100PF 10% 50V	
C661	1-162-282-31	CERAMIC 100PF 10% 50V	
C662	1-162-282-31	CERAMIC 100PF 10% 50V	
C663	1-162-282-31	CERAMIC 100PF 10% 50V	
C664	1-162-282-31	CERAMIC 100PF 10% 50V	
C665	1-162-282-31	CERAMIC 100PF 10% 50V	
C666	1-162-282-31	CERAMIC 100PF 10% 50V	
C667	1-162-282-31	CERAMIC 100PF 10% 50V	
C668	1-162-282-31	CERAMIC 100PF 10% 50V	
C669	1-162-282-31	CERAMIC 100PF 10% 50V	
C670	1-162-282-31	CERAMIC 100PF 10% 50V	
C671	1-162-282-31	CERAMIC 100PF 10% 50V	
C717	1-126-157-11	ELECT 10uF 20% 16V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C718	1-126-157-11	ELECT 10uF 20% 16V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C719	1-126-961-11	ELECT 2.2uF 20.00% 50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C720	1-164-159-11	CERAMIC 0.1uF 50V	(EA)
C721	1-162-294-31	CERAMIC 0.001uF 10% 50V	(EA)
C722	1-162-305-11	CERAMIC 0.0068uF 30.00% 16V	(EA)
C723	1-126-960-11	ELECT 1uF 20.00% 50V	(EA)
C724	1-136-495-11	MYLAR 0.068uF 5.00% 50V	(EA)
C725	1-126-959-11	ELECT 0.47uF 20.00% 50V	(EA)
C726	1-124-465-00	ELECT 0.47uF 20% 50V	(EA)
C727	1-136-167-00	MYLAR 0.15uF 5.00% 50V	(EA)
C728	1-162-294-31	CERAMIC 0.001uF 10% 50V	(EA)
C729	1-126-960-11	ELECT 1uF 20.00% 50V	(EA)
C730	1-161-494-00	CERAMIC 0.022uF 25V	(EA)
C731	1-162-305-11	CERAMIC 0.0068uF 30.00% 16V	(EA)
C732	1-136-495-11	MYLAR 0.068uF 5.00% 50V	(EA)
C733	1-104-664-11	ELECT 47uF 20.00% 10V	(EA)
C734	1-124-589-11	ELECT 47uF 20% 16V	(EA)
C735	1-124-257-00	ELECT 2.2uF 20% 50V	(EA)
C736	1-126-964-11	ELECT 10uF 20.00% 50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C737	1-126-964-11	ELECT 10uF 20.00% 50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C738	1-126-961-11	ELECT 2.2uF 20.00% 50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C739	1-162-215-31	CERAMIC 47PF 5% 50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C740	1-162-282-31	CERAMIC 100PF 10% 50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C741	1-124-463-00	ELECT 0.1uF 20% 50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C742	1-162-215-31	CERAMIC 47PF 5% 50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C743	1-162-290-31	CERAMIC 470PF 10% 50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C744	1-162-294-31	CERAMIC 0.001uF 10% 50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C745	1-126-961-11	ELECT 2.2uF 20.00% 50V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C746	1-162-306-11	CERAMIC 0.01uF 30.00% 16V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C747	1-126-961-11	ELECT 2.2uF 20.00% 50V	(EA)
C748	1-162-306-11	CERAMIC 0.01uF 30.00% 16V	(EA)
C749	1-162-306-11	CERAMIC 0.01uF 30.00% 16V	(AR,AUS,E,EA,KR,MX,MY,SP,TW)
C750	1-162-282-31	CERAMIC 100PF 10% 50V	
C751	1-162-282-31	CERAMIC 100PF 10% 50V	
C752	1-162-282-31	CERAMIC 100PF 10% 50V	
C753	1-162-282-31	CERAMIC 100PF 10% 50V	
C754	1-162-282-31	CERAMIC 100PF 10% 50V	
C755	1-162-282-31	CERAMIC 100PF 10% 50V	
C756	1-162-282-31	CERAMIC 100PF 10% 50V	
C757	1-162-282-31	CERAMIC 100PF 10% 50V	
C758	1-162-282-31	CERAMIC 100PF 10% 50V	
C759	1-162-282-31	CERAMIC 100PF 10% 50V	

Ref. No.	Part No.	Description	Remarks
C760	1-162-282-31	CERAMIC 100PF 10%	50V
C761	1-162-282-31	CERAMIC 100PF 10%	50V
C762	1-162-282-31	CERAMIC 100PF 10%	50V
C763	1-162-282-31	CERAMIC 100PF 10%	50V
C764	1-162-282-31	CERAMIC 100PF 10%	50V
C765	1-162-282-31	CERAMIC 100PF 10%	50V
C766	1-162-282-31	CERAMIC 100PF 10%	50V
C767	1-162-282-31	CERAMIC 100PF 10%	50V
C768	1-162-282-31	CERAMIC 100PF 10%	50V
C769	1-162-282-31	CERAMIC 100PF 10%	50V
C770	1-162-282-31	CERAMIC 100PF 10%	50V
C771	1-162-282-31	CERAMIC 100PF 10%	50V
C772	1-162-282-31	CERAMIC 100PF 10%	50V
C773	1-162-282-31	CERAMIC 100PF 10%	50V
C774	1-162-282-31	CERAMIC 100PF 10%	50V
C775	1-162-282-31	CERAMIC 100PF 10%	50V
C776	1-162-282-31	CERAMIC 100PF 10%	50V
C777	1-162-282-31	CERAMIC 100PF 10%	50V
C778	1-162-282-31	CERAMIC 100PF 10%	50V
C779	1-162-282-31	CERAMIC 100PF 10%	50V
C780	1-162-282-31	CERAMIC 100PF 10%	50V
C781	1-162-282-31	CERAMIC 100PF 10%	50V
C782	1-162-282-31	CERAMIC 100PF 10%	50V
C783	1-162-282-31	CERAMIC 100PF 10%	50V
C784	1-162-282-31	CERAMIC 100PF 10%	50V
		< CONNECTOR >	
CN601	1-793-767-11	CONNECTOR, BOARD TO BOARD 30P	
		< DIODE >	
D601	8-719-057-30	DIODE HLMF-K205-2UL	
D602	8-719-063-93	DIODE SLR325VC-N-T32	
D603	8-719-921-48	DIODE MTZJ-T-72-5.6C	
D611	8-719-071-41	DIODE SELS5923C-TP15 (GROOVE)	
D612	8-719-071-41	DIODE SELS5923C-TP15 (CURSOL)	
D613	8-719-071-41	DIODE SELS5923C-TP15 (CURSOL)	
D614	8-719-071-41	DIODE SELS5923C-TP15 (V-GROOVE)	
D615	8-719-072-82	DIODE SELU5E20C-STP15 (FUNCTION)	
D617	8-719-063-93	DIODE SLR325VC-N-T32 (REC/PAUSE)	
D618	8-719-071-41	DIODE SELS5923C-TP15 (SURROUND)	
		< FERRITE BEAD >	
FB601	1-412-473-21	INDUCTOR 0UH	
FB602	1-412-473-21	INDUCTOR 0UH	
FB603	1-412-473-21	INDUCTOR 0UH (EXCEPT TH)	
		< FILTER >	
FL601	1-517-928-11	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC601	8-759-652-49	IC TMP88CP77F-1A22	
IC602	8-759-083-77	IC BA3830F	
IC603	8-759-648-23	IC RPM6940-H4 (SIRCS)	
IC721	8-759-496-40	IC M65850FP (EA)	
IC722	8-759-634-51	IC M5218AP	
		(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)	

Ref. No.	Part No.	Description	Remarks
		< JACK >	
J631	1-785-569-11	JACK (SMALL TYPE)(PHONE)	
J721	1-785-569-11	JACK (SMALL TYPE)(MIC 1)	
		(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)	
J722	1-785-569-11	JACK (SMALL TYPE)(MIC 2) (EA)	
		< COIL >	
L601	1-410-509-11	INDUCTOR 10uH	
		< TRANSISTOR >	
Q604	8-729-900-80	TRANSISTOR BA1A4M-TP	
Q605	8-729-900-80	TRANSISTOR BA1A4M-TP	
Q606	8-729-900-74	TRANSISTOR BA1L3Z-TP	
Q607	8-729-900-74	TRANSISTOR BA1L3Z-TP	
Q608	8-729-900-74	TRANSISTOR BA1L3Z-TP	
Q609	8-729-900-74	TRANSISTOR BA1L3Z-TP	
Q610	8-729-900-74	TRANSISTOR BA1L3Z-TP	
Q611	8-729-900-74	TRANSISTOR BA1L3Z-TP	
Q612	8-729-900-74	TRANSISTOR BA1L3Z-TP	
Q613	8-729-900-74	TRANSISTOR BA1L3Z-TP	
Q614	8-729-900-74	TRANSISTOR BA1L3Z-TP	
Q615	8-729-111-29	TRANSISTOR 2SD1616A-TP-LK	
Q621	8-729-900-80	TRANSISTOR BA1A4M-TP	
Q622	8-729-900-80	TRANSISTOR BA1A4M-TP	
Q623	8-729-900-80	TRANSISTOR BA1A4M-TP	
Q624	8-729-900-80	TRANSISTOR BA1A4M-TP	
Q625	8-729-900-80	TRANSISTOR BA1A4M-TP	
Q626	8-729-900-80	TRANSISTOR BA1A4M-TP	
Q721	8-729-119-79	TRANSISTOR 2SC2785TP-FEK	
		(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)	
		< RESISTOR >	
R603	1-249-429-11	CARBON 10K 5%	1/4W
R604	1-247-807-31	CARBON 100 5%	1/4W
R605	1-247-903-00	CARBON 1M 5%	1/4W
R606	1-247-807-31	CARBON 100 5%	1/4W
R607	1-249-429-11	CARBON 10K 5%	1/4W
R608	1-247-807-31	CARBON 100 5%	1/4W
R609	1-249-429-11	CARBON 10K 5%	1/4W
R610	1-247-807-31	CARBON 100 5%	1/4W
R611	1-249-429-11	CARBON 10K 5%	1/4W
R612	1-249-401-11	CARBON 47 5%	1/4W F
R613	1-247-893-11	CARBON 390K 5%	1/4W
R614	1-247-893-11	CARBON 390K 5%	1/4W
R615	1-249-441-11	CARBON 100K 5%	1/4W
R616	1-249-440-11	CARBON 82K 5%	1/4W
R617	1-249-429-11	CARBON 10K 5%	1/4W
R618	1-249-441-11	CARBON 100K 5%	1/4W
R619	1-249-441-11	CARBON 100K 5%	1/4W
R620	1-249-437-11	CARBON 47K 5%	1/4W
R621	1-249-440-11	CARBON 82K 5%	1/4W
R622	1-249-429-11	CARBON 10K 5%	1/4W
R623	1-249-431-11	CARBON 15K 5%	1/4W
R625	1-249-435-11	CARBON 33K 5%	1/4W
R626	1-247-895-00	CARBON 470K 5%	1/4W
R633	1-249-411-11	CARBON 330 5%	1/4W
R634	1-249-407-11	CARBON 150 5%	1/4W F

PANEL

Ref. No.	Part No.	Description				Remarks
R635	1-249-401-11	CARBON	47	5%	1/4W	F
R636	1-249-441-11	CARBON	100K	5%	1/4W	
R637	1-249-441-11	CARBON	100K	5%	1/4W	
R638	1-249-441-11	CARBON	100K	5%	1/4W	
R639	1-249-441-11	CARBON	100K	5%	1/4W	
R640	1-249-441-11	CARBON	100K	5%	1/4W	
R641	1-249-441-11	CARBON	100K	5%	1/4W	
R642	1-249-441-11	CARBON	100K	5%	1/4W	
R643	1-249-441-11	CARBON	100K	5%	1/4W	
R644	1-249-441-11	CARBON	100K	5%	1/4W	
R651	1-249-429-11	CARBON	10K	5%	1/4W	
R652	1-249-410-11	CARBON	270	5%	1/4W	F
R653	1-249-411-11	CARBON	330	5%	1/4W	
R654	1-249-413-11	CARBON	470	5%	1/4W	F
R655	1-249-415-11	CARBON	680	5%	1/4W	F
R656	1-249-417-11	CARBON	1K	5%	1/4W	F
R657	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R658	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R659	1-249-417-11	CARBON	1K	5%	1/4W	F
R660	1-249-420-11	CARBON	1.8K	5%	1/4W	F
R661	1-247-843-11	CARBON	3.3K	5%	1/4W	
R662	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R664	1-249-429-11	CARBON	10K	5%	1/4W	
R665	1-249-410-11	CARBON	270	5%	1/4W	F
R666	1-249-411-11	CARBON	330	5%	1/4W	
R667	1-249-413-11	CARBON	470	5%	1/4W	F
R668	1-249-414-11	CARBON	560	5%	1/4W	F
R669	1-249-414-11	CARBON	560	5%	1/4W	F
R670	1-249-415-11	CARBON	680	5%	1/4W	F
R671	1-249-422-11	CARBON	2.7K	5%	1/4W	F
R672	1-249-420-11	CARBON	1.8K	5%	1/4W	F
R673	1-249-422-11	CARBON	2.7K	5%	1/4W	F
R674	1-247-843-11	CARBON	3.3K	5%	1/4W	
R675	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R676	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R677	1-249-429-11	CARBON	10K	5%	1/4W	
R678	1-249-432-11	CARBON	18K	5%	1/4W	
R679	1-249-429-11	CARBON	10K	5%	1/4W	
R680	1-249-410-11	CARBON	270	5%	1/4W	F
R681	1-249-411-11	CARBON	330	5%	1/4W	
R682	1-249-413-11	CARBON	470	5%	1/4W	F
R683	1-249-414-11	CARBON	560	5%	1/4W	F
R684	1-249-415-11	CARBON	680	5%	1/4W	F
R693	1-249-429-11	CARBON	10K	5%	1/4W	
R694	1-249-429-11	CARBON	10K	5%	1/4W	
R695	1-249-429-11	CARBON	10K	5%	1/4W	
R696	1-249-429-11	CARBON	10K	5%	1/4W	
R701	1-249-409-11	CARBON	220	5%	1/4W	F
R702	1-249-407-11	CARBON	150	5%	1/4W	F
R703	1-249-409-11	CARBON	220	5%	1/4W	F
R704	1-249-411-11	CARBON	330	5%	1/4W	
R705	1-249-410-11	CARBON	270	5%	1/4W	F
R706	1-249-409-11	CARBON	220	5%	1/4W	F
R721	1-260-099-11	CARBON	1K	5%	1/2W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R722	1-260-100-11	CARBON	1.2K	5%	1/2W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R723	1-249-433-11	CARBON	22K	5%	1/4W	(EA)
R724	1-249-433-11	CARBON	22K	5%	1/4W	(EA)
R725	1-249-433-11	CARBON	22K	5%	1/4W	(EA)
R726	1-249-437-11	CARBON	47K	5%	1/4W	(EA)
R727	1-249-433-11	CARBON	22K	5%	1/4W	(EA)
R728	1-249-429-11	CARBON	10K	5%	1/4W	(EA)
R729	1-249-433-11	CARBON	22K	5%	1/4W	(EA)
R730	1-249-433-11	CARBON	22K	5%	1/4W	(EA)
R731	1-247-881-00	CARBON	120K	5%	1/4W	(EA)
R733	1-249-429-11	CARBON	10K	5%	1/4W	(EA)
R734	1-247-807-31	CARBON	100	5%	1/4W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R735	1-247-885-00	CARBON	180K	5%	1/4W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R736	1-249-429-11	CARBON	10K	5%	1/4W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R737	1-249-437-11	CARBON	47K	5%	1/4W	(EA)
R737	1-249-433-11	CARBON	22K	5%	1/4W	(AR,AUS,E,KR,MX,MY,SP,TH,TW)
R738	1-249-417-11	CARBON	1K	5%	1/4W	F (AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R739	1-249-441-11	CARBON	100K	5%	1/4W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R740	1-249-417-11	CARBON	1K	5%	1/4W	F (AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R741	1-249-429-11	CARBON	10K	5%	1/4W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R742	1-249-417-11	CARBON	1K	5%	1/4W	F (EA)
R744	1-249-441-11	CARBON	100K	5%	1/4W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
R745	1-247-807-31	CARBON	100	5%	1/4W	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
		< VARIABLE RESISTOR >				
RV721	1-225-739-11	RES, VAR CARBON 50K (ECHO) (EA)				
RV722	1-225-739-11	RES, VAR CARBON 50K (MIC)				(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
		< SWITCH >				
S601	1-418-725-11	ENCODER, ROTARY (12 TYPE) (VOLUME)				
S611	1-762-875-21	SWITCH, KEYBOARD (UP)				
S612	1-762-875-21	SWITCH, KEYBOARD (DOWN)				
S613	1-762-875-21	SWITCH, KEYBOARD (V-GROOVE)				
S614	1-762-875-21	SWITCH, KEYBOARD (LOOP)				
S615	1-762-875-21	SWITCH, KEYBOARD (CD SYNC)				
S616	1-762-875-21	SWITCH, KEYBOARD (REC/PAUSE)				
S617	1-762-875-21	SWITCH, KEYBOARD (ENTER/NEXT)				
S618	1-762-875-21	SWITCH, KEYBOARD (FF)				
S619	1-762-875-21	SWITCH, KEYBOARD (AMS+)				

Ref. No.	Part No.	Description	Remarks
S620	1-762-875-21	SWITCH, KEYBOARD (PAUSE)	
S621	1-762-875-21	SWITCH, KEYBOARD (-AMS)	
S623	1-762-875-21	SWITCH, KEYBOARD (LEFT)	
S624	1-762-875-21	SWITCH, KEYBOARD (RIGHT)	
S625	1-762-875-21	SWITCH, KEYBOARD (TAPE A/B)	
S626	1-762-875-21	SWITCH, KEYBOARD (STOP)	
S627	1-762-875-21	SWITCH, KEYBOARD (CD)	
S628	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)	
S629	1-762-875-21	SWITCH, KEYBOARD (PLAY)	
S630	1-762-875-21	SWITCH, KEYBOARD (MD(VIDEO))	
S631	1-762-875-21	SWITCH, KEYBOARD (REV)	
S632	1-762-875-21	SWITCH, KEYBOARD (SURROUND)	
S633	1-762-875-21	SWITCH, KEYBOARD (DIRECTION)	
S634	1-762-875-21	SWITCH, KEYBOARD (REPEAT)	
S635	1-762-875-21	SWITCH, KEYBOARD (PLAY MODE)	
S636	1-762-875-21	SWITCH, KEYBOARD (EDIT)	
S637	1-762-875-21	SWITCH, KEYBOARD (POWER)	
S638	1-762-875-21	SWITCH, KEYBOARD (GROOVE)	
S639	1-762-875-21	SWITCH, KEYBOARD (EQ EDIT)	
S640	1-762-875-21	SWITCH, KEYBOARD (SPECTRUM)	
S641	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)	
		< VIBRATOR >	
X601	1-579-352-11	VIBRATOR, CERAMIC 12.5MHz	

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Ref. No.	Part No.	Description	Remarks
	A-4428-077-A	CD SWITCH BOARD, COMPLETE **************************	
		< DIODE >	
D630	8-719-056-13	DIODE SML79423C-TP15	
D631	8-719-056-13	DIODE SML79423C-TP15	
D632	8-719-056-13	DIODE SML79423C-TP15	
		< TRANSISTOR >	
Q630	8-729-422-57	TRANSISTOR BN1A4M-TP	
Q631	8-729-422-57	TRANSISTOR BN1A4M-TP	
Q632	8-729-422-57	TRANSISTOR BN1A4M-TP	
Q633	8-729-422-57	TRANSISTOR BN1A4M-TP	
Q634	8-729-422-57	TRANSISTOR BN1A4M-TP	
Q635	8-729-422-57	TRANSISTOR BN1A4M-TP	
		< RESISTOR >	
R685	1-249-417-11	CARBON 1K 5% 1/4W	F
R686	1-249-418-11	CARBON 1.2K 5% 1/4W	F
R687	1-249-420-11	CARBON 1.8K 5% 1/4W	F
R688	1-249-422-11	CARBON 2.7K 5% 1/4W	F
R689	1-247-843-11	CARBON 3.3K 5% 1/4W	
R750	1-249-406-11	CARBON 120 5% 1/4W	F
R751	1-249-406-11	CARBON 120 5% 1/4W	F
R752	1-249-406-11	CARBON 120 5% 1/4W	F
R753	1-249-406-11	CARBON 120 5% 1/4W	F
R754	1-249-406-11	CARBON 120 5% 1/4W	F
R755	1-249-406-11	CARBON 120 5% 1/4W	F

Ref. No.	Part No.	Description	Remarks
		< SWITCH >	
S642	1-762-875-21	SWITCH, KEYBOARD (DISC SKIP)	
S643	1-762-875-21	SWITCH, KEYBOARD (DISC 1)	
S644	1-762-875-21	SWITCH, KEYBOARD (DISC 2)	
S645	1-762-875-21	SWITCH, KEYBOARD (DISC 3)	
S646	1-762-875-21	SWITCH, KEYBOARD (CD OPEN/CLOSE)	

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Ref. No.	Part No.	Description	Remarks
	A-4428-079-A	POWER AMP BOARD, COMPLETE ***************************	(AED,AEP,CIS,G,UK,US)
	A-4428-094-A	POWER AMP BOARD, COMPLETE ***************************	(AR,AUS,E,EA,KR,MX,MY,SP,TW)
	A-4428-336-A	POWER AMP BOARD, COMPLETE (CND) ***************************	
	A-4428-901-A	POWER AMP BOARD, COMPLETE (TH) ***************************	
	1-533-293-31	FUSE HOLDER	
		< CAPACITOR >	
C501	1-126-963-11	ELECT 4.7uF 20.00% 50V	
C502	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C503	1-162-286-31	CERAMIC 220PF 10% 50V	
C504	1-104-665-11	ELECT 100uF 20.00% 10V	
C507	1-136-495-11	MYLAR 0.068uF 5.00% 50V	
C508	1-136-495-11	MYLAR 0.068uF 5.00% 50V	
C509	1-128-560-11	ELECT 22uF 20.00% 100V	
C510	1-128-578-11	ELECT 1uF 20.00% 100V	
C511	1-162-306-11	CERAMIC 0.01uF 30.00% 16V	
C512	1-162-306-11	CERAMIC 0.01uF 30.00% 16V	
C541	1-136-165-00	MYLAR 0.1uF 5.00% 50V	
C542	1-127-753-11	ELECT 3300uF 20% 71V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)
C542	1-126-974-11	ELECT 3300uF 20.00% 50V	(CND)
C542	1-127-752-11	ELECT 3300uF 20% 63V	(AED,AEP,CIS,G,UK,US)
C551	1-126-963-11	ELECT 4.7uF 20.00% 50V	
C552	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C553	1-162-286-31	CERAMIC 220PF 10% 50V	
C554	1-104-665-11	ELECT 100uF 20.00% 10V	
C557	1-136-495-11	MYLAR 0.068uF 5.00% 50V	
C558	1-136-495-11	MYLAR 0.068uF 5.00% 50V	
C559	1-128-560-11	ELECT 22uF 20.00% 100V	
C581	1-126-967-11	ELECT 47uF 20.00% 50V	
C591	1-136-165-00	MYLAR 0.1uF 5.00% 50V	
C592	1-127-753-11	ELECT 3300uF 20% 71V	(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW
C592	1-126-974-11	ELECT 3300uF 20.00% 50V	(CND)
C592	1-127-752-11	ELECT 3300uF 20% 63V	(AED,AEP,CIS,G,UK,US)
C942	1-126-964-11	ELECT 10uF 20.00% 50V	
C943	1-126-968-11	ELECT 100uF 20.00% 50V	
C980	1-164-159-11	CERAMIC 0.1uF 50V	
		< CONNECTOR >	
CN502	1-778-981-11	CONNECTOR, BOARD TO BOARD 13P	
CN503	1-778-981-11	CONNECTOR, BOARD TO BOARD 13P	

POWER AMP

SUB-TRANS

Ref. No.	Part No.	Description				Remarks
		< DIODE >				
D501	8-719-911-19	DIODE	1SS133T-72			
D502	8-719-911-19	DIODE	1SS133T-72			
D541	8-719-302-38	DIODE	RBV-602-01			
D551	8-719-911-19	DIODE	1SS133T-72			
D581	8-719-911-19	DIODE	1SS133T-72			
D941	8-719-983-99	DIODE	MTZJ-T-72-39D			
D979	8-719-110-31	DIODE	MTZJ-T-72-12B			
		< EARTH >				
* EP502	1-537-738-21	TERMINAL, EARTH				
		< IC >				
IC501	8-749-016-94	IC	STK402-090 (CND)			
IC501	8-749-016-96	IC	STK402-120 (EXCEPT CND)			
		< TRANSISTOR >				
Q501	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA			
Q503	8-729-140-82	TRANSISTOR	2SA988TP-PAFAEA			
Q504	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA			
Q505	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA			
			(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)			
Q506	8-729-119-79	TRANSISTOR	2SC2785TP-FEK			
			(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)			
Q551	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA			
Q581	8-729-140-84	TRANSISTOR	2SC1841TP-PAFAEA			
Q941	8-729-048-52	TRANSISTOR	2SA1932(TP)			
		< RESISTOR >				
R501	1-249-417-11	CARBON	1K	5%	1/4W	F
R502	1-249-438-11	CARBON	56K	5%	1/4W	
R503	1-249-414-11	CARBON	560	5%	1/4W	F
R504	1-249-438-11	CARBON	56K	5%	1/4W	
R505	1-249-417-11	CARBON	1K	5%	1/4W	F
R506	1-249-431-11	CARBON	15K	5%	1/4W	
R507	1-249-441-11	CARBON	100K	5%	1/4W	
⚠R508	1-217-156-00	METAL	0.22	20%	5W	
R509	1-260-076-11	CARBON	10	5%	1/2W	
⚠R510	1-217-156-00	METAL	0.22	20%	5W	
⚠R511	1-212-881-11	FUSIBLE	100	5%	1/4W	
⚠R512	1-202-972-61	FUSIBLE	1	5%	1/4W	
R513	1-249-435-11	CARBON	33K	5%	1/4W	
R514	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R515	1-249-433-11	CARBON	22K	5%	1/4W	
R516	1-249-429-11	CARBON	10K	5%	1/4W	
R517	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R518	1-249-435-11	CARBON	33K	5%	1/4W	
R519	1-249-439-11	CARBON	68K	5%	1/4W	
R521	1-249-441-11	CARBON	100K	5%	1/4W	
			(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)			
R522	1-249-441-11	CARBON	100K	5%	1/4W	
			(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)			
R523	1-249-441-11	CARBON	100K	5%	1/4W	
			(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)			
R541	1-249-437-11	CARBON	47K	5%	1/4W	
R551	1-249-417-11	CARBON	1K	5%	1/4W	F
R552	1-249-438-11	CARBON	56K	5%	1/4W	
R553	1-249-414-11	CARBON	560	5%	1/4W	F
R554	1-249-438-11	CARBON	56K	5%	1/4W	
R555	1-249-417-11	CARBON	1K	5%	1/4W	F
R556	1-249-431-11	CARBON	15K	5%	1/4W	
R557	1-249-441-11	CARBON	100K	5%	1/4W	
⚠R558	1-217-156-00	METAL	0.22	20%	5W	
R559	1-260-076-11	CARBON	10	5%	1/2W	
⚠R560	1-217-156-00	METAL	0.22	20%	5W	
⚠R561	1-212-881-11	FUSIBLE	100	5%	1/4W	
R581	1-249-435-11	CARBON	33K	5%	1/4W	
R582	1-249-435-11	CARBON	33K	5%	1/4W	
R591	1-249-437-11	CARBON	47K	5%	1/4W	
R942	1-249-429-11	CARBON	10K	5%	1/4W	
R943	1-249-417-11	CARBON	1K	5%	1/4W	F
R980	1-249-429-11	CARBON	10K	5%	1/4W	
		< THERMISTOR >				
TH501	1-807-796-11	THERMISTOR				
			(AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)			
**						
	A-4428-082-A	SUB TRANS BOARD, COMPLETE				
						(AED,AEP,CIS,G,UK)
		***************************				
	A-4428-959-A	SUB TRANS BOARD, COMPLETE (CND)				
		***************************				
	A-4428-088-A	SUB TRANS BOARD, COMPLETE (US)				
		***************************				
		< CAPACITOR >				
⚠C971	1-113-925-11	CERAMIC	0.01uF	20.00%	250V	
						(US)
C973	1-126-933-11	ELECT	100uF	20.00%	16V	
C975	1-126-768-11	ELECT	2200uF	20.00%	16V	
C976	1-164-159-11	CERAMIC	0.1uF		50V	
C977	1-164-159-11	CERAMIC	0.1uF		50V	
C978	1-164-159-11	CERAMIC	0.1uF		50V	
		< CONNECTOR >				
CN974	1-564-321-00	PIN, CONNECTOR 2P				
CN976	1-506-468-11	PIN, CONNECTOR 3P				
		< DIODE >				
⚠D971	8-719-911-19	DIODE	1SS133T-72			
D972	8-719-024-99	DIODE	11ES2-NTA2B			
D973	8-719-024-99	DIODE	11ES2-NTA2B			
D974	8-719-024-99	DIODE	11ES2-NTA2B			
D975	8-719-024-99	DIODE	11ES2-NTA2B			
D976	8-719-911-19	DIODE	1SS133T-72			
		< IC >				
IC971	8-759-039-69	IC	uPC7805AHF			
		< TRANSISTOR >				
Q971	8-729-119-78	TRANSISTOR	2SC2785TP-HFE			

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Ref. No.	Part No.	Description	Remarks
		< RESISTOR >	
R974	1-249-441-11	CARBON 100K 5%	1/4W
R975	1-249-429-11	CARBON 10K 5%	1/4W
		< RELAY >	
⚠RY971	1-755-276-11	RELAY, POWER	
		< TRANSFORMER >	
⚠T972	1-435-209-11	TRANSFORMER, POWER (CND,US)	
⚠T972	1-435-210-11	TRANSFORMER, POWER (AED,AEP,CIS,G,UK)	
**			
	1-676-192-11	TRANS BOARD ************	
	1-533-293-31	FUSE HOLDER	
		< CAPACITOR >	
C941	1-126-969-11	ELECT 220uF 20.00%	50V
		< CONNECTOR >	
CN975	1-564-321-00	PIN, CONNECTOR 2P (AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)	
* CN977	1-564-527-11	PLUG, CONNECTOR 12P	
		< DIODE >	
D977	8-719-024-99	DIODE 11ES2-NTA2B	
		< FUSE >	
⚠F971	1-532-506-31	FUSE 6.3A (AR,E,EA,MX,MY,SP,TW)	
⚠F973	1-576-109-11	FUSE 5A (US,CIS)	
⚠F974	1-532-506-31	FUSE 6.3A (EXCEPT CIS)	
⚠F974	1-576-109-11	FUSE 5A (CIS)	
⚠F974	1-576-193-21	FUSE 6.3A (US)	
⚠F975	1-532-506-31	FUSE 6.3A (EXCEPT CIS)	
⚠F975	1-576-109-11	FUSE 5A (CIS)	
⚠F975	1-576-193-21	FUSE 6.3A (US)	
		< RESISTOR >	
⚠R941	1-202-972-61	FUSIBLE 1 5%	1/4W
⚠R951	1-219-120-11	FUSIBLE 0.15 5%	1/4W
⚠R952	1-219-120-11	FUSIBLE 0.15 5%	1/4W
⚠R953	1-219-120-11	FUSIBLE 0.15 5%	1/4W
R961	1-202-725-00	SOLID 3.3M 10%	1/2W (US)
		< TRANSFORMER >	
⚠T972	1-435-261-11	TRANSFORMER, POWER (AED,AEP,CIS,UK)	
⚠T972	1-435-262-11	TRANSFORMER, POWER (AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)	
⚠T972	1-435-263-11	TRANSFORMER, POWER (CND)	
⚠T972	1-435-264-11	TRANSFORMER, POWER (US)	
		< SWITCH >	
⚠S951	1-771-291-31	SWITCH, POWER (VOL SEL) (AR,E,EA,MY,SP,TW)	
**			

Ref. No.	Part No.	Description	Remarks
		MISCELLANEOUS **************	
M961	1-763-072-11	FAN, D.C. (AR,AUS,E,EA,KR,MX,MY,SP,TH,TW)	
101	1-773-045-11	WIRE (FLAT TYPE) (17 CORE)	
104	1-773-122-11	WIRE (FLAT TYPE) (19 CORE)	
⚠108	1-696-847-11	CORD, POWER (AUS)	
⚠108	1-769-079-21	CORD, POWER (KR)	
⚠108	1-777-071-51	CORD, POWER (AED,AEP,CIS,EA,MY,SP,TW)	
⚠108	1-783-820-11	CORD, POWER (CND,US)	
⚠108	1-783-941-11	CORD, POWER (AR)	
⚠108	1-790-226-11	CORD, POWER (UK,G)	
⚠108	1-791-901-11	CORD, POWER (E,MX,TH)	
⚠109	1-569-008-31	ADAPTOR, CONVERSION (EA,MY,SP,TW)	
209	1-791-983-12	WIRE (FLAT TYPE) (8 CORE)	
216	1-471-035-11	MAGNET ASSY	
⚠222	8-820-116-01	OPTICAL PICK-UP BLOCK (KSM-213DAP)	
**			
		************** HARDWARE LIST **************	
#1	7-628-254-05	SCREW +PS 2.6X5	
#2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#3	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#4	7-685-650-79	SCREW +BVTP 3X16 TYPE2 N-S	
#5	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S	
#6	7-685-881-09	SCREW +BVTT 4X8 (S)	

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